

Joseph H. Vicari, Director Gary Quinn, Deputy Director Barbara Jo Crea, Commissioner Virginia E. Haines, Commissioner John P. Kelly, Commissioner

Tristin J. Collins, Director, Management & Budget Jennifer L. Bowens, Purchasing Agent

County of Ocean Administration Building 101 Hooper Avenue Toms River, NJ 08754

# **BID**

# MOTOR VEHICLES: VARIOUS BODIED HEAVY DUTY TRUCKS

2023

ADVERTISEMENT DATE: May 31, 2023 OPENING: June 21, 2023, 11:00 am

Bid Category: 04- Automotive Products, Vehicles and Services

## NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that sealed bids for the furnishing and delivery of MOTOR VEHICLES: VARIOUS BODIED HEAVY DUTY TRUCKS for the County of Ocean, will be received by the Purchasing Agent of the County of Ocean on Wednesday, June 21, 2023 at 11:00 am, prevailing time.

Bids will be received electronically via the <u>County's OpenGov Electronic Bid Portal</u> (https://procurement.opengov.com/portal/oceancounty/)

Specifications and form of proposal are on the <u>Procurement Portal (Link Above)</u> or available for viewing in the Department of Purchase, Room #224, Administration Building, 101 Hooper Avenue, Toms River, New Jersey. Direct all inquiries to Jennifer L. Bowens, Purchasing Agent.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and P.L. 1975 C. 127 (N.J.A.C. 17:27-1 et seq.) regarding equal employment opportunities and with the requirements of P.L. 1977 C.33 regarding corporate and/or partnership ownership.

The right to reject any and all bids is reserved in accordance with applicable law.

By order of the Board of Commissioners of the County of Ocean.

Signed:

JOSEPH H. VICARI, Director JENNIFER L. BOWENS, Purchasing Agent

# CONTACT INFORMATION AND PROJECT TIMELINE

# **Summary**

The purpose of this bid package is to provide the County of Ocean with a Contractor who will supply the materials or services described and specified herein.

# **Contact Information**

For further information regarding these specifications, contact

# Brian W. McCarthy

Director

Email: ocpurchasing@co.ocean.nj.us

Phone: (732) 349-4579

**Department:** Vehicle Services

## **Timeline**

Advertising Date	May 31, 2023
Bid Opening Date	June 21, 2023, 11:00am Administration Building, 101 Hooper Ave., Room 119, Toms River, NJ, 08753

# IMPORTANT INSTRUCTIONS FOR ELECTRONIC SUBMITTAL

## **Instructions for Electronic Bid Submission**

The County is accepting electronic bid submissions with Open Gov by following these instructions:

Sign up for a FREE account at <a href="https://procurement.opengov.com/portal/oceancounty">https://procurement.opengov.com/portal/oceancounty</a>

Once you have completed account registration, browse back to this page: <u>County's OpenGov</u> <u>Electronic Bid Portal (https://procurement.opengov.com/portal/oceancounty/)</u>

Click on the bid of interest, then click "Draft Response".

Follow the instructions to submit the electronic bid.

It is important to note that this process should be completed well in advance of the bid deadline / bid opening. DO NOT WAIT UNTIL THE LAST MINUTE. The County's electronic submission system will not allow electronic bids to be submitted once the deadline has passed, even if you've already started the process. The deadline is based on the countdown timer found on the ProcureNow bid submission page.

# INSTRUCTIONS TO BIDDERS

# **Bid Opening**

All bids will be opened publicly in the Administration Building, Room 119, 101 Hooper Avenue, Toms River, New Jersey, commencing at 11:00 am, prevailing time on Wednesday, June 21, 2023.

#### **Electronic Bid Submissions**

Bids must be submitted electronically through Ocean County's Procurement Portal by the date and time stipulated in the Notice to Bidders.

#### **Deadline Instructions**

The County will not be responsible for late bids, and no bids will be accepted if received after the time stipulated in the notice to bidders.

## **Completion of all Documents**

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package and must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

NOTE: In order to access any DocuSign forms in this solicitation, you must first click "Draft Response".

Instructions on how to access the forms through DocuSign are available in the Attachments. Please note that in order to view the forms as a .pdf document, you must access DocuSign first. Once you access DocuSign, the option to download, save, print and complete the forms becomes available

#### Right to Reject

The County reserves the right to reject all bids in accordance with N.J.S.A. 40A:11-13.2, to waive any informalities in the bid and to accept the lowest responsible bid in accordance with applicable law.

# **Bidder Default**

In case of default by the bidder or contractor, the County of Ocean may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

#### **Indemnity**

The bidder, if awarded a contract, agrees to protect, defend and save harmless the County against any damage for payment for the use of any patented material process, article or device that may

enter into the manufacture, construction or form a part of the work covered by either order or contract, and he further agrees to indemnify and save harmless the County from suits or actions of every nature and description brought against it, for, or on account of injuries or damages received or sustained by any party or parties by, or from any of the negligent acts of the contractor, his servants or agents.

# **Specifications**

It is to be understood by the bidder that this bid is submitted on the basis of specifications prepared by the County and the fact that any bidder is not familiar with these specifications or conditions will not be accepted as an excuse.

#### **Bid Security**

NO BID SECURITY

#### **Performance Bond**

NO PERFORMANCE BOND

#### **Pricing Proposal**

Bidders must use the pricing proposal provided in the bid specifications. Failure to use the pricing proposal in the bid specifications shall be cause for rejection of the bid.

#### **Pricing**

Insert prices for furnishing all of the material and/or labor described or required. Prices shall be net, including any charges for packing, crating, containers, etc. and all transportation charges fully prepaid by the contractor F.O.B. destination and placement at locations specified by the County. No additional charges will be allowed for any transportation costs resulting from partial shipments made at the vendor's convenience when a single shipment is ordered.

#### **Payment**

Payments will be made upon the approval of vouchers submitted by the successful bidders in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. The County will not pay interest or late fees regardless of language provided.

#### **Discrepancy in Pricing**

In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall prevail. In the event there is an error of the summation of the extended totals, the computation by the OWNER of the extended totals shall govern.

#### **Award Timeframe**

Award will be made by Ocean County Board of Commissioners within sixty (60) days after receipt of bids.

#### **Equal or Tie Bids**

The County of Ocean reserves the right to award at their discretion to any one of the tie bidders where it is most advantageous for the County to do so, pursuant to N.J.S.A. 40A:11-6.1.

### Tax Exempt

The County of Ocean is exempt from any State sales tax or Federal excise tax.

#### **Equivalent Product**

For purpose of evaluation where an equivalent product is being furnished, bidder must indicate any variation to our specifications no matter how slight. If no variations are indicated, it will be construed that the bid fully complies with our specifications.

#### **Quantities**

Quantities shown are approximate and the County reserves the right to decrease or omit quantities. The County will not consider minimums placed on order quantities. The County also reserves the right to increase quantities to twenty (20) percent of the maximum quantities listed at the unit price bid, in accordance with N.J.A.C. 5:30-11.3.

#### **Delivery of Goods and Services**

Delivery shall be made upon receipt of a Purchase Order issued by the Ocean County Department of Purchase, upon which delivery locations and needed quantities shall be indicated.

#### **American Goods and Products**

All contractors must comply with the provisions of New Jersey Statute Title 40A:11-18, when applicable.

#### **Market Conditions**

Due to the fact that goods provided by this solicitation and the current economic conditions are in a volatile state, the County will allow the Contractor to request a price adjustment outside the normal contract renewal process only if it can be demonstrated and documented that on a national basis the goods solicited and utilized have experienced a significant cost increase since the date of contract award.

Such events shall be industry wide and cause all related product prices to be effected. All price adjustment requests must be in writing and submitted to the Ocean County Purchasing Department for approval. If approved, the Contractor will provide the County with revised

pricing. The Contractor may not request an additional increase for a period of three (3) months from the prior request.

Note: A request for price increase does not guarantee approval.

#### **Specific Market Conditions for Motor Vehicles**

If the current model year changes mid contract, the vendor can submit a price adjustment request to the County for the next model year. Requests for price adjustments must include justification and documentation such as a notice of an increase in the manufacturer's price and/or an increase in the industry. Requests, including specifications and a revised price sheet, must be submitted to the Ocean County Purchasing Agent for review and approval. If approved, the revised specifications and price sheet will be posted on line for all future purchases for the new model year vehicle.

Additionally, if the awarded model vehicle is no longer available to order, the County reserves the right to purchase the same make and model vehicle (any year) from the awarded vendor from the lot, if available. Specifications and a price quote for these vehicles must be submitted to the Ocean County Purchasing Agent for review and approval before an order can be placed.

#### **Assignment**

This agreement shall not be assigned without the written consent of the County of Ocean.

#### **NJ One Call**

By presenting a bid, contractor declares that he is aware of and, if required, will comply with the requirements of the "Underground Facility Protection Act (Public Law 1994, Chapter 118)" prior to commencing any intended excavation. The telephone number to call is 1-800-272-1000.

#### Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq

The bidder must comply with the provisions of "The Public Works Contractor Registration Act", if applicable.

- All named contractors must be registered with the Department of Labor and Workforce Development pursuant to the Public Works Contractor Registration Act at the time the proposal is received, or the proposal will be determined to be non-responsive.
- Any non-listed contractor must be registered with the Department of Labor and Workforce Development prior to physically starting work. It is the responsibility of the General Contractor to insure that all non-listed sub-contractors comply.
- Contractors are encouraged to submit their and all named sub-contractors' Public Works Contractor Registration Certificates with the bid.

#### **Prevailing Wage & Labor Laws**

The New Jersey Prevailing Wage Act (P.L. 1963, Chapter 150) and provisions of the State Labor Laws must be complied with by the successful bidder, if applicable. The current Prevailing Wage

Rates can be found online at <a href="https://www.nj.gov/labor/wageandhour/prevailing-rates/public-works/currentprevailingwage.shtml">https://www.nj.gov/labor/wageandhour/prevailing-rates/public-works/currentprevailingwage.shtml</a>

#### New Jersey Business Registration Requirements

Pursuant to N.J.S.A. 52:32-44, Ocean County ("Contracting Agency") is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the Contracting Agency with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Contracting Agency prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

During the course of contract performance:

- (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- (2) the contractor shall maintain and submit to the Contracting Agency a list of subcontractors and their addresses that may be updated from time to time.
- (3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at http://www.state.nj.usreasury/revenue/busregcert.shtml.

Before final payment is made under the contract, the contractor shall submit to the Contracting Agency a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

#### Pay to Play Requirements

Starting in January 2007, all business entities are advised of their responsibility to file an annual disclosure statement of political contributions with the New Jersey Election Law Enforcement Commission (ELEC) pursuant to N.J.S.A. 19:44A-20.27 if they receive contracts in excess of \$50,000 from public entities in a calendar year. Business entities are responsible for determining if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at <a href="https://www.elec.state.nj.us">www.elec.state.nj.us</a>.

#### **Statement of Ownership**

The provisions of N.J.S.A. 52:25-24.2 applies to all forms of corporations and partnerships, including, but not limited to, limited partnerships, limited liability corporations, limited liability partnerships, and Subchapter S corporations.

#### Certification of Non-Involvement in Prohibited Activities in Iran

Certification of Non-Involvement in Prohibited Activities in Iran. Pursuant to N.J.S.A. 52:32-58, the proposer must certify that neither the proposer, nor one of its parents, subsidiaries, and/or affiliates (as defined in N.J.S.A. 52:32-56(e)(3)), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in N.J.S.A. 52:32-56(f). If the proposer is unable to so certify, the proposer shall provide a detailed and precise description of such activities. Prior to contract award or authorization, the contractor shall provide the Contracting Agency with a completed Certification on Non-Involvement in Prohibited Activities in Iran.

### Certification of Non-Involvement In Prohibited Activities in Russia or Belarus

Pursuant to N.J.S.A. 52:32-60.1, the "person or entity" (as defined in N.J.S.A. 52:32-60.1, et seq) seeking to enter into or renew a contract for the provision of goods or services or the purchase of bonds or other obligations shall certify that it is not "engaging in prohibited activities in Russia or Belarus" (as such term is defined in as defined in N.J.S.A. 52:32-60.1, et seq. If the person or entity is unable to certify, the person or entity shall provide a detailed and precise description of such activities. The N.J.S.A. 52:32-60.1 certification form must be completed prior to contract award and is provided in the specification documents (DocuSign).

Vendors may view the Precluded Entities List Here: https://www.nj.govreasury/administration/pdf/RussiaBelarusEntityList.pdf

#### **Insurance Requirements**

The contractor shall maintain primary insurance to protect against all claims under Workmen's Compensation, Comprehensive General Liability and Automobile. Except for Workmen's Compensation, all coverage shall apply as primary coverage with respect to any other insurance or self-insurance program afforded to the County. There shall be no endorsement or modification of this coverage to make it excess over other available insurance/coverage; alternatively, if the CGL and umbrella, excess of reinsurance states that it is pro rata, it shall be endorsed to be primary with respect to the County. Primary Coverage shall be subject to approval for adequacy of protection as per the following limits:

#### **Worker's Compensation**

- 1. Limits according to Worker's compensation Laws of the State of New Jersey.
- 2. Contractor's Liability not less than \$100,000.

#### **Comprehensive General Liability**

- 1. Bodily Injury \$500,000 per person; \$1,000,000 per occurrence.
- 2. Property Damage \$1,000,000 per occurrence.

# **Comprehensive General Liability Details**

Comprehensive Automobile Liability shall include the following:

Business auto liability insurance or its equivalent with a minimum limit of \$1,000,000 per accident and including coverage for all of the following:

- A. Liability arising out of the ownership, maintenance or use of any auto;
- B. Auto non-ownership and hired car coverage.
- C. Contractor's Worker's Compensation, Comprehensive General Liability and
- D. Comprehensive Automobile Liability arising out of subcontractor's operations shall be identical as that listed above.

#### **Proof of Insurance**

Copies of each insurance certificate shall be furnished to the County when requested.

### **County Cooperative Contract Purchasing System**

The County has established a "COUNTY COOPERATIVE CONTRACT PURCHASING SYSTEM" pursuant to N.J.S.A. 40a:11-1 et seq...

The IDENTIFIER for this system is:

#### **CK-02-OC**

This system allows local government contracting entities located within the geographical boundaries of the County to purchase goods and services awarded as a result of this bid proposal if it is extended by the low bidder.

Goods and services must be made available without substitution or deviation from specifications, size, features, quality, price or availability as herein set forth. It is understood that orders, if any, will be placed directly by contracting units, subject to the overall terms of the contract to be awarded by the County of Ocean.

The estimated quantities listed in this specification reflect only the needs of the agencies under the direct control of the Ocean County Board of Commissioners. If the vendor chooses to extend the resulting contract to all other contracting units, the quantities could be higher.

Please check ( $\sqrt{\ }$ ) the YES or NO box in the Vendor Questionnaire to indicate whether or not you will extend contract prices to all contracting units.

# AWARD METHOD

Contract will be awarded on a lump sum by item basis.

# MANDATORY EQUAL EMPLOYMENT OPPORTUNITY

N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

#### GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

- Letter of Federal Affirmative Action Plan Approval
- Certificate of Employee Information Report
- Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at <a href="https://www.state.nj.usreasury/contract\_compliance">www.state.nj.usreasury/contract\_compliance</a>)

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27**.

# AMERICANS WITH DISABILITIES ACT

Equal Opportunity For Individuals With Disabilities

The CONTRACTOR and the COUNTY do hereby agree that the provisions of title II of the Americans with Disabilities Act of 1990 (the "Act") (42 U.S.C. 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the COUNTY pursuant to this contract, the CONTRACTOR agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the COUNTY in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect and save harmless the COUNTY, its agents, servants and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the COUNTY'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the COUNTY which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the COUNTY or if the COUNTY incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The COUNTY shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the COUNTY or any of its agents, servants and employees, the COUNTY shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the COUNTY or its representatives.

It is expressly agreed and understood that any approval by the COUNTY of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect and save harmless the COUNTY pursuant to this paragraph.

It is further agreed and understood that the COUNTY assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provision of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the COUNTY from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

# MOTOR VEHICLE SPECIFIC SCOPE OF WORK

#### **CONTRACT TERMS**

Contract shall be one (1) year from date of award or until delivery is complete unless otherwise stated. The County reserves the right to extend the term of the contract pursuant to N.J.S.A. 40A:11-15.

#### **SPECIFICATIONS**

Detailed specifications for this bid are located in the Vendor Questionnaire under the question labeled "Compliance Pages for MOTOR VEHICLES: VARIOUS BODIED HEAVY DUTY TRUCKS".

#### **INTENT**

The purpose of this bid package is to provide the County of Ocean with a contractor(s) who will supply current model year, or newer Motor Vehicles as specified herein.

#### **NO ASSIGNMENT**

This agreement shall not be assigned without the written consent of the County of Ocean which consent shall not be unreasonably withheld. Assignee shall promptly prepare and complete such documents as the County shall require.

#### **AVAILABILITY AND DELIVERY**

The bidder should indicate the number of days required for the delivery After Receipt of Order (A.R.O.). If not submitted with the bid proposal, the County reserves the right to request this information prior to the award of contract.

#### **OWNERSHIP DISCLOSURE**

All contractors shall comply with all laws governing the disclosure of all stockholders or partners, as included in N.J.S.A. 52:25-24.2.

#### **BID REVIEW**

Bids may be reviewed at the bid opening and results will be made available online through the County's procurement portal once the bid meeting has concluded. Additionally, bid results are available in the Ocean County Purchasing Department on the day following the bid openings for any interested party that may wish to review them.

#### **MODIFICATIONS & WITHDRAWALS**

Bids may be withdrawn based from the bidder prior to the time fixed for opening. No right for withdrawal exists after the bid has been opened. Written request shall be signed by the bidder or proper corporate officers.

#### **EVALUATION**

The quality of the equipment supplied, their conformity with the specifications, their suitability to requirements, delivery terms, guaranty clauses, price of the materials shall all be taken into consideration. Where equivalent equipment is offered, the County will determine if the proposed item is equal or better than that specified. The awards will be made on the basis of a comparison of prices of each vehicle listed with standard equipment plus the cost of optional equipment.

#### TRANSITIONAL PERIOD

In the event services are terminated by contract expiration or by voluntary termination by either the Contractor or the County of Ocean, the Contractor shall continue all terms and conditions of said contract for a period not to exceed one (1) month at the County's request.

#### **AVAILABILITY OF FUNDS**

The County's obligation hereunder is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the County for payment of any money shall arise unless, and until funds are made available each year to the Ocean County Purchasing Agent.

#### **MANUALS**

Unless otherwise indicated, a minimum of three (3) complete sets of manuals, for each model year, MUST be provided with the first vehicle/equipment delivery as follows (thumb drive, CD/DVD/USB format preferred, if available):

- 1) Operator's Manual
- 2) Parts Book
- 3) Shop Service Manuals including wiring diagrams and trouble shooting guide
- 4) Hydraulic System Manual including parts book and service repair manual (if applicable)

#### TRAINING AND TECHNICAL SUPPORT

If requested, training shall be provided by the successful bidder for operators and mechanics at a County location with instructional materials as needed.

#### **COOLING SYSTEM PROTECTION**

All vehicles furnished must be protected to -20°F (-30°C) with permanent type anti-freeze and summer coolant.

#### **AIR CONDITIONING**

All air conditioning shall be factory installed, support system (cooling, electrical, etc.) shall be upgraded in accordance with factory recommendations.

#### **FUEL & FLUIDS**

All vehicles will be delivered with a minimum of one-half (½) tank of fuel. All other fluids will be filled in accordance with the manufacturer's recommended levels.

## **STANDARD EQUIPMENT**

These specifications include all standard equipment provided for each vehicle unless specifically upgraded or deleted. In the event options are required, the contractor shall provide upgrading of all support systems affected, in accordance with factory recommendations.

#### **DESIGN**

Materials shall be of good commercial quality for the intended service and shall be produced by use of current manufacturing processes and treated to resist rust, corrosion and wear. The design of the mechanical member shall be such that the stress imposed through normal shock loads of maximum engine torque, shall not cause rupture or permanent deformation or undue wear on any member.

#### **REPAIRS**

All repairs are to be performed at the location the vehicle is stationed or at a service center within the County. All requests for repairs must be responded to within 24 hours.

## **DEMONSTRATION**

Bidder shall be prepared to give, prior to bid award, a complete demonstration of the equipment proposed at a County facility or a mutually agreed to location and time within the State of New Jersey. The equipment so demonstrated shall be complete as offered by the bidder.

#### **SERVICE**

Contractor shall be able to service all equipment proposed. The contractor shall maintain a service facility staffed with qualified service personnel and a working inventory of parts.

#### WARRANTY

All warranty paperwork will be supplied with each unit at the time of delivery and shall be in typed form. The warranty commences with the final inspection and acceptance of the unit by the County. The authorized Dealer's Warranty shall be for a minimum of one (1) year period from date of final inspection and acceptance by the County for parts and labor on chassis, engine, transmission and all optional equipment. The vendor shall furnish for each vehicle delivered, all of the manufacturer's standard warranty against defects in material, workmanship and design in said vehicles. This agreement shall cover all warranty work, minor warranty and service work at

the successful bidder's location. When requested by the Director of Vehicle Services, this agreement shall also cover all warranty work, minor warranty and service work at a County facility. The successful bidder will be responsible for vehicle transportation for all warranty repairs and recall work for the complete vehicle and installed equipment during the standard or extended warranty period, when applicable. The vehicle must be picked up within five (5) working days of notification that work is required, and returned to the County within seven (7) working days. Bidder shall have full service facility stocked with parts capable of performing all warranty and non-warranty repairs, to ensure efficient and economic maintenance of the vehicles and to reduce down time. In the case of any unnecessary delays in repairing vehicles with warranty work because of parts availability or service scheduling, the Director of Vehicle Services shall be notified and, if requested, a replacement vehicle shall be provided.

#### DESCRIPTIVE LITERATURE AND TECHNICAL SPECIFICATIONS

Bidders are encouraged to submit descriptive literature and technical specifications with their bid. If not submitted with the bid, the County reserves the right to request this information, prior to contract award.

#### **USE OF OTHER NAMES AND REFERENCES**

Unless otherwise stated, the use of manufacturers' names and product numbers are for descriptive purposes, and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise it is fully understood that they shall furnish all items as stated.

#### **MODEL INFORMATION REQUIRED**

The manufacturer, make and exact models proposed as substitutes shall also be submitted on bidder's letterhead with any proposal contended to be "equivalent". The vehicles, equipment and accessories shall be new. The bidder shall specify the specific model being bid in each class or type of vehicle.

## ROLL-OVER MODEL YEAR

The County will consider any request for a contract roll-over to the next model year after the passing of the vehicle manufacturer's cut-off date, at the same contract pricing, specifications, terms and conditions or better. If a roll-over is agreed upon between the awarded bidder and Vehicle Services Director and approved by the Purchasing Agent, the contract affected by the roll-over will be amended to the newest model year information.

#### **CUT-OFF DATES FOR MODEL YEAR SPECIFIED**

The bidder shall notify the County of Ocean Purchasing Department, c/o Jennifer Bowens, Purchasing Agent, P.O. Box 2191, Toms River, NJ 08754 in writing or by fax (732-288-7636) no less than thirty days prior to the factory cut-off date for any vehicle under contract. Successful bidder MUST provide written proof from manufacturer of factory cut-off dates and MUST confirm receipt of same by the County of Ocean Purchasing Department.

#### COMPLIANCE TO MINIMUM BID REQUIREMENTS EQUIVALENT PROPOSALS

It is the intent of these specifications to describe and govern the purchase of new and unused motor vehicles equipment with any and all accessories as noted herein. The units shall conform to the highest quality of manufacturing and design standards. Any item or items not specifically mentioned herein, but which would be required to produce a complete working unit, shall be supplied by the vendor. All bidders must answer compliance questions in full. A general exception cannot be taken for any paragraph or item. If a bidder is basing his proposal on equipment other than what is specified in these bid documents and wishes the equipment he proposes to be considered as an "approved equal", he shall submit on a separate sheet, in the exact format of the technical specifications contained herein, an item by item description of that which he proposes to substitute including any and all variations from or exceptions to the conditions and specifications of this bid. Failure to comply may result in rejection of bid.

#### **KEYS**

A minimum of six (6) sets of keys are required with each vehicle and piece of equipment ordered. This is a minimum requirement: if additional sets are required, it will be indicated in the detailed specification section.

#### **BID PROPOSAL PRICE INCLUSIONS**

The price quoted shall include all options specified and all transportation charges fully prepaid to Ocean County Department of Vehicle Services, Chestnut Street, Toms River, New Jersey.

#### **FLEET NUMBER**

For Ford Vendors: The County of Ocean Fleet number is QB504.

#### PRE-BUILD

A detailed vehicle production plan must be provided and approved prior to the start of any upfitting. The production plan detail must include exact mounting locations and configurations for all components.

#### **TITLES**

Each vehicle must be delivered with a New Jersey motor vehicle new vehicle inspection sticker in place as prescribed by law. Each vehicle must also be delivered with a New Jersey Motor Vehicle Commission title, registration, and plates. (Temporary plates are not acceptable) Deliver with title issued as follows: 610 234 000 08754 0 Ocean, County of PO Box 2191, Admin. Bldg. Toms River, NJ 08754

#### DELIVER WITH TITLE NOT CERTIFICATION OF ORIGIN

Notwithstanding the delivery of the title, the County reserves the right to inspect the vehicles and reject them if non-conforming to the specifications.

#### **DELIVERY REQUIREMENTS**

Please be advised that when delivering vehicles and/or equipment to the County of Ocean the following procedure must be strictly adhered to:

- 1. Three (3) days prior to delivery, the successful contractor is required to contact Vehicle Services at (732) 349-4579 and speak with one of the service writers for an approved delivery date.
- 2. Two (2) days prior to the vehicle delivery the successful bidder will provide via Electronic Delivery (E-mail) a completed and accurate Vehicle Data Sheet and Parts Listing Sheet in a Word Document format for each vehicle being delivered.
- 3. The successful bidder will have a representative available, and if requested, present during the check-in process.
- 4. ALL manuals and related materials, as requested in the specifications, MUST be presented to appropriate County personnel at time of delivery of said vehicles /equipment.
- 5. ALL parts, if requested in the specifications (i.e. belts, filters, hoses, etc.), MUST be presented at time of delivery.
- 6. The successful contractor shall provide, upon delivery, a list of all supplies (filters, hoses, belts, etc.) needed for the periodic maintenance for the first year. This list shall be complete with part numbers.
- 7. The successful contractor shall provide, upon delivery, an "As Built" list of all installed equipment and part numbers to cover the vehicle chassis and body.
- 8. The successful contractor will also be responsible to fill out any and all paperwork needed by the County prior to vehicle delivery. This will assure proper data entry of each vehicle to aide in any future warranty issues.
- 9. A letter of assurance, on the awarded bidder's company letter head, shall accompany each delivered vehicle, certifying that the vehicle meets or exceeds all specifications as ordered on the Purchase Order.
- 10. The vehicles furnished shall comply with all safety laws, rules and regulations of the State of New Jersey and with standards for automotive vehicles. A DOT (Department of Transportation) Safety Kit shall be delivered with each vehicle purchased and include a First Aid Kit, Fire Extinguisher, and Safety Triangles.
- 11. The vehicles, equipment and accessories shall be new and ready for immediate use upon delivery, all service and make-ready having been done prior to delivery. Any vehicle not in such condition will be rejected. All vehicles are to be delivered to the Ocean County Department of Vehicle Services, Chestnut Street, Toms River, New Jersey.

- 12. No advertising shall appear on any vehicle delivered under the terms of the contract. Further, the contractor will not affix the dealer name to the vehicle. Vehicles delivered to final destinations with dealer's advertising will be rejected.
- 13. No Vehicle will be accepted at the final delivery point without all supporting documentation and paperwork completed and delivered with the units, which include the vehicle title, warranty, odometer/engine hour statement (if applicable), specified manuals, any line set tickets, invoice and keys sets. No unit will be considered accepted until it has undergone final inspection.
- 14. All delivered vehicles must be clean both inside and outside. Manufacturer's standard items, such as hubcaps, floor mats, jack and lug wrench or the like, shall be provided, installed, by the contractor prior to delivery.

#### **DELIVERY INSPECTIONS**

Prior to presentation for inspection, it shall be the contractor's responsibility to pre-inspect each vehicle. The vehicle must conform to the manufacturer's "new vehicle prep" procedures, if any. The contractor will be required to submit a copy of any "new vehicle prep" procedures upon delivery of the vehicle. Each vehicle presented for inspection shall be accompanied by an inspection package including, but not limited to the following: purchase order, line set sheet (when available) and dealer's pre-inspection prep checklist. The checklist will list the responsible prep mechanic and acknowledge that the vehicle conforms to delivery specifications and that all added equipment and accessories have been properly installed.

Reasons for rejection of units include, but are not limited to:

- 1. Grinding noise in the wheels (wheel bearings).
- 2. Improperly aligned wheels.
- 3. Damaged rims.
- 4. Any spare tire-rim not mounted on vehicle.
- 5. Leakage of oil.
- 6. Transmission leaking fluid at transmission cooler lines or transmission seals.
- 7. Leakage at rear end.
- 8. Leaking at radiator.
- 9. Fuel Leaks.
- 10. Restrictions in fuel system.
- 11. Leakage in any part of the exhaust system.
- 12. Excessively noisy brakes or excessive brake pedal travel.
- 13. Oil pan damage.
- 14. Inoperative windshield wipers.
- 15. Windshield washer not functioning properly.
- 16. Windshield washer bottle leaking.

- 17. Transmission malfunctions.
- 18. Lack of grease fittings in ball joints, U-joints, etc. if factory standard.
- 19. Horn blowing while driving or inoperative.
- 20. Gauges or dials missing/malfunctioning.
- 21. Vehicle pulls to one side.
- 22. Seatbelts not operating properly.
- 23. Keys not working properly.
- 24. Door locks inoperative.
- 25. Oil dipstick missing or rust on dipstick.
- 26. Appropriate new vehicle inspection sticker not furnished on windshield.
- 27. Lights running, turn, backup, brake, side indicators, and indicator lights not working properly.
- 28. Lenses missing on interior/exterior light or water in lenses.
- 29. Any manufacturing deficiencies which permit water leakage into passenger compartment.
- 30. Windows not operating properly.
- 31. Vehicle not properly prepped in accordance with the manufacturer's pre-delivery specifications.
- 32. Vehicle not configured with all equipment and items specified in the contract/purchase order.
- 33. Body dents, scratches and other defects.
- 34. Body paint defects.
- 35. Water leak through roof.
- 36. Any defects in equipment installation.
- 37. Electrical system problem.
- 38. Any defects in after-market components, such as truck body, snow plow, aerial platform, generator, winch, crane and lift-gate.
- 39. Improperly run wiring and hoses along the chassis.

Inspected units which do not comply with these or other requirements will be rejected. If a vehicle has been rejected, the contractor will be notified and the notification will indicate the reason for rejection. All rejected units will be corrected and the corrected unit(s) will be presented for re-inspection within seven (7) working days. The ordering Department may cancel the purchase order if the contractor fails to correct any problem, without incurring any cost or fee.

# **VENDOR QUESTIONNAIRE**

#### **County Cooperative Contract Purchasing System\***

Vendor will extend contract prices to "County Cooperative Contract Purchasing System"
Participants as described in <u>Instruction to Bidders</u> .
□ Yes
$\square$ No
*Response required

#### **BID DOCUMENTS TO BE EXECUTED\***

Documents include:

- Signature Page
- Non Collusion Certification
- Affirmative Action Questionnaire
- Statement of Ownership (N.J.S.A. 52:25-24.2) (Mandatory Document)
- Prohibited Russia-Belarus Activities & Iran Investment Activities

# FAILURE TO SUBMIT ANY OF THESE DOCUMENTSMAY BE CAUSE FOR REJECTION OF YOUR PROPOSAL.

All documents should be from this proposal package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising.

NOTE: For detailed instructions on how to complete the forms via DocuSign, please access the "Instructions for Completing Forms in DocuSign" document available in the Attachments.

Please note: The County's preferred method of submission is DocuSign.

Click here to go to the form

\*Response required

#### Copy of Bidder's Certificate of Employee Information Report

Within seven (7) days after receipt of the notification of intent to award the contract or receipt of the contract, whichever is sooner, a Contractor should present one of the following to the County of Ocean:

- (a) An existing federally approved or sanctioned affirmative action program.
- (b) A New Jersey Certificate of Employee Information Report Approval.
- (c) If the Contractor cannot present "a" or "b", the Contractor is required to submit a completed Employee Information Report (Form AA302). This form will be made available to the Contractor by the County of Ocean.

# QUESTIONS BELOW MUST BE ANSWERED BY ALL CONTRACTORS ON THE AFFIRMATIVE ACTION DOCUMENT:

1. Do you have a Federally approved or sanctioned Affirmative Action Program?

If yes, please upload a photocopy of such approval.

2. Do you have a State of New Jersey "Certificate of Employee Information Report" approval?

If yes, please upload a photocopy of such certificate.

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf) Images (jpg, png, bmp, tif)

#### Copy of Bidder's New Jersey Business Registration Certificate

Please use this area to upload your company's BRC.

Use this link to verify your company's BRC:

https://www1.state.nj.us/TYTR BRC/jsp/BRCLoginJsp.jsp

Please note that a BRC is not required at the time of bid submission but shall be required prior to the award of a contract.

P	lease	note.	the or	ılv	accei	otab	le	file	forms	are	as	foll	ows	s:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf) Images (jpg, png, bmp, tif)

#### Mandatory Equal Employment Opportunity Statement\*

A	
*Response required	
□ No	
□ Yes	
Does the BIDDER comply with the #Mandatory Equal Employment Opportunity Staten	nent?

#### Americans with Disabilities Act Provisions\*

Does the BIDDER	comply with t	the	#Americans	with	<b>Disabilities</b>	Act	<b>Provis</b>	sions?

☐ Yes

 $\square$  No

<sup>\*</sup>Response required

#### **Descriptive Literature and Warranty Details\***

Please supply all descriptive literature and warranty details for all items being bid as well as a list of all diagnostic tools and testing equipment, if applicable.

Please note, the only acceptable file forms are as follows:

Documents (doc, docx, rtf, txt, xls, xlsx, pdf) Images (jpg, png, bmp, tif)

\*Response required

#### Mechanic and Operator Training for All Heavy Duty Motor Vehicles\*

#### MECHANIC AND OPERATOR TRAINING

Training shall be provided by the successful bidder for operators and Mechanics at a County location with instructional materials as needed.

Mechanic training will be provided on site for shop mechanics and supervisors. Class size will not exceed twenty (20) total people. Separate training sessions may be required to accommodate the County's two (2) shifts. Training will be conducted to include the following minimum material:

- Brake system component identification / diagnosis and service procedures
- Electrical system features / diagnosis / maintenance
- Air conditioning system diagnostic and service procedures
- Engine repair and maintenance to include specifications / components / sensor locations
- Emissions equipment to include exhaust after treatment / regeneration / warning system
- Internet based Service and Parts Manual usage

Operator training will be provided for a minimum of four (4) hours immediately following vehicle check in and acceptance. The training will cover familiarization of the truck chassis, installed equipment, and truck hydraulic system operation.

By confirming this question, bidder understands they shall comply with the Mechanic's Training set forth above.

lease	

# <u>COMPLIANCE PAGES FOR MOTOR VEHICLES: VARIOUS BODIED HEAVY</u> DUTY TRUCKS\*

Please download the attached Compliance Pages. Complete each compliance line by placing a check mark in the box for yes or no. Once finished, upload the completed document. If you are taking any exceptions to any of the compliance lines, please list and explain each exception

<sup>\*</sup>Response required

in detail on company letterhead. Please upload the exceptions letter with the completed compliance pages.

• <u>COMPLIANCE PAGES FOR MOTOR ...</u>

## **ADDITIONAL VENDOR DOCUMENTATION**

Please submit any additional information you wish to be considered as part of your bid package.

Please note, the only acceptable file forms are as follows: Documents (doc, docx, rtf, txt, xls, xlsx, pdf)

Images (jpg, png, bmp, tif)

# Acknowledgement of Submission of Forms from Current Bid Package\*

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

	Pl	ease	c	onf	ĩrm	
*R	esi	pons	se	req	uire	d

# Submission of Bid Package\*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

□ P1	ease c	onf	firm	
*Res	ponse	req	uired	L

<sup>\*</sup>Response required

# PRICING PROPOSAL

# ITEM #1 - CURRENT MODEL YEAR OR NEWER, FORD F550 REGULAR CAB WITH STEEL DUMP BODY, AS SPECIFIED, OR EQUAL

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
1	Current Model Year Or Newer, Ford F550 Regular Cab With Steel Dump Body, As Specified, Or Equal	25	EA						
OPTIONS			1	1		1			
la	Upgrade Chassis to Super Cab Chassis, retaining 60" Cab to Axle, as specified	25	EA						
16	Upgrade Chassis to Crew Cab Chassis, retaining 60" Cab to Axle, As Specified	25	EA						
1c	Upgrade to Regular Cab Chassis with 84" Cab to Axle, As Specified	25	EA						
1d	Upgrade to Super Cab Chassis with 84" Cab to Axle, As Specified	25	EA						
1e	Upgrade to Crew Cab Chassis with 84" Cab to Axle, as Specified	25	EA						
1f	Fold Down Sides on Standard Dump Body, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
1g	Stainless Steel Body Upgrade Dimensions, as Specified	25	EA						
1h	Stainless Steel Fold Down Sides for Stainless Steel Body Option, as Specified	25	EA						
1i	Body Paint Option for Stainless Steel Body Upgrade, as Specified	25	EA						
1j	Central Hydraulic System Hydraulic Pump, as Specified	25	EA						
1k	Stainless Steel UTG Spreader General, as Specified	25	EA						
11	Dump- Through Liftgate, as Specified	25	EA						
1m	I-Pack Tool Box, as Specified	25	EA						
ln	ProTech Aluminum I- Pack with Stainless Steel Doors PN #20- 2737, as Specified	25	EA						
10	30" Under Body Tool Box, as Specified	25	EA						
1p	Stainless Steel V-Box General, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
1q	Spreader Leg Stand Kit PN #3037295, as Specified	25	EA						
1r	Air Compressor, 70 CFM, as Specified	25	EA						
1s	Air Compressor, 150 CFM, as Specified	25	EA						
1t	Go-Lights, Model 30264, as Specified	25	EA						
1u	9' Readily Detachable Western Snow Plow System, as Specified	25	EA						
1v	Poly Electric Spreader Dimensions, as Specified	25	EA						
1w	Whelen Light Bar LED Liberty II Solo IX 48", as Specified	25	EA						
1x	Road Department Paint Color Scheme, as Specified	25	EA						
1y	Special Paint Colors Not On the Standard Color Chart, as Specified	25	EA						
1z	Diagnostic Tools / Test Equipment, as Specified	3	SET						
laa	Two-Way Radio Power and Wiring Requirements for New Vehicles, as Specified	25	EA						

1bb Installation of County Supplied Two Way Radio and Accessories, as Specified  1cc Technical 180 HR	Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
		of County Supplied Two Way Radio and Accessories,	25	EA						
Support, as Specified		Support, as	180	HR						

# ITEM #2 - CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH 9 FOOT UTILITY BODY, AS SPECIFIED, OR EQUAL

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
2	Current Model Year Or Newer, Ford F550 Regular Cab With 9 Foot Utility Body, As Specified, Or Equal	25	EA						
OPTIONS									
2a	Upgrade Chassis to Super Cab Chassis, retaining 60" Cab to Axle, as specified	25	EA						
2b	Upgrade Chassis to Crew Cab Chassis, retaining 60" Cab to Axle, As Specified	25	EA						
2c	Upgrade to Regular Cab Chassis with 84" Cab to Axle, As Specified	25	EA						
2d	Upgrade to Super Cab Chassis with 84" Cab to Axle, As Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
2e	Upgrade to Crew Cab Chassis with 84" Cab to Axle, as Specified	25	EA						
2f	9' Aluminum Utility Body Upgrade Body Shell, as Specified	25	EA						
2g	11 Foot Body Upgrade, as Specified	25	EA						
2h	Maxon Liftgate, as Specified	25	EA						
2i	Flip Top Compartment both Street and Curbside for 9 Foot Utility Body, as Specified	25	EA						
2j	Flip Top Compartment both Street and Curbside for 11 Foot Utility Body, as Specified	25	EA						
2k	Raised Front Curbside Compartment for both 9 Foot and 11 Foot Utility Bodies (Bottle Gas Retainer Not Included), as Specified	25	EA						
21	Bottle Retainer Compartment, as Specified	25	EA						
2m	High Compartment Body, 9 Foot Utility Body, as Specified	25	EA						
2n	High Compartment Body, 11 Foot Utility Body, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
20	Subfloor with Full Height Tailgate, as Specified	25	EA						
2p	Transverse Compartment, as Specified	25	EA						
2q	C-Tech Drawer Unit for Standard Height Body, as Specified	25	EA						
2r	C-Tech Drawer Unit for 60" High Utility Body, as Specified	25	EA						
2s	Venco Venturo 4,000 LB. Electric Crane, as Specified	25	EA						
2t	Custom Rear Work Bumper, as Specified	25	EA						
2u	Ladder Rack, as Specified	25	EA						
2v	E-Track Down Each Side of Body - 2" from Top of Compartments, As specified or Equal	25	EA						
2w	Four (4) 2' X 12" Ratchet Straps, As Specified	25	EA						
2x	BASF Spray Liner on Floor of Compartments, as Specified	25	EA						
2у	Whelen LED Liberty II Solo IX 48" Light Bar, as Specified	25	EA						
2z	Light Color Option for Liberty II Solo IX 48" Light Bar	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
2aa	Emergency Lighting Split Red Blue Body Lights, as Specified	25	EA						
2bb	Trailblazer 302 Air Pak, as Specified	25	EA						
2cc	Winch, as Specified	25	EA						
2dd	Air Compressor, 150 CFM, as Specified	25	EA						
2ee	Pioneer Flood Light Head - Model PFP2P1, or Equal, as Specified	25	EA						
2ff	Cast Iron Mechanic's Vise on Removable Plate with Receiver Type Hitch, as Specified	25	EA						
2gg	Husky 815- Piece Mechanic's tool Set, as Specified	25	EA						
2hh	Truck Steel Air/Hydraulic Service Jack, as Specified	25	EA						
2ii	1700 Peak Amp 12 Volt Jumper Starter, as Specified	25	EA						
2jj	Booster Jump Set, as Specified	25	EA						
2kk	Road Department Paint Color Scheme, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
	Vehicle Special Order Paint Colors Not on the Standard Color Chart, as Specified	25	EA						
	EnPak A30GBW, as Specified	25	EA						
2nn	Inverter, as Specified	25	EA						
	Go-Lights, Model 3024, as Specified	25	EA						
	Readily Detachable Western Snow Plow System, as Specified	25	EA						
	Poly Electric Spreader, as Specified	25	EA						
	Pipe Vise on Removable Plate with Receiver Type Hitch, as Specified	25	EA						
	Diagnostic Tools / Test Equipment, as Specified	3	SET						
	Two-Way Radio Power and Wiring Requirements for New Vehicles, as Specified	25	EA						
	Installation of County Supplied Two Way Radio and Accessories, as Specified	25	EA						
2vv	Technical Support, as	180	HR						

# ITEM #3 - CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
3	Current Model Year Or Newer, Ford F550 Regular Cab With Enclosed Utility Service Body, As Specified, Or Equal	25	EA						
OPTIONS	'							'	
3a	Upgrade Chassis to Super Cab Chassis, retaining 60" Cab to Axle, as specified	25	EA						
3b	Upgrade Chassis to Crew Cab Chassis, retaining 60" Cab to Axle, As Specified	25	EA						
3c	Upgrade to Regular Cab Chassis with 84" Cab to Axle, As Specified	25	EA						
3d	Upgrade to Super Cab Chassis with 84" Cab to Axle, As Specified	25	EA						
3e	Upgrade to Crew Cab Chassis with 84" Cab to Axle, as Specified	25	EA						
3f	Medium Height Enclosed Body Upgrade, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
3g	High Height Enclosed Body Upgrade, as Specified	25	EA						
3h	11 Foot Low Height Enclosed Body Upgrade For Use With 84" CA Chassis, as Specified	25	EA						
3i	11 Foot Medium Height Enclosed Body Upgrade For Use With 84" CA Chassis, as Specified	25	EA						
3j	11 Foot High Height Enclosed Body Upgrade For Use With 84" CA Chassis, as Specified	25	EA						
3k	Aluminum Body Upgrade from Steel, As Specified	26	EA						
31	Medium Height Enclosed Body Upgrade, as Specified	25	EA						
3m	High Height Enclosed Body Upgrade, as Specified	25	EA						
3n	11 Foot Medium Height Enclosed Body Upgrade For Use With 84" CA Chassis, as Specified	25	EA						
30	11 Foot High Height Enclosed Body Upgrade For Use With 84" CA Chassis, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
3p	Side Access Doors In Roof, as Specified	25	EA						
3q	Bottle Retainer Compartment, as Specified	25	EA						
3r	BASF DTE Liner AXALTA, as Specified	25	EA						
3s	Whelen 900 Series Super LED Scene Lights, as Specified	25	EA						
3t	Inverter, as Specified	25	EA						
3u	BASF Spray Liner on Floor and Sides of Cargo Area, as Specified	25	EA						
3v	BASF Spray Liner on Floor of Compartments, as Specified	25	EA						
3w	Hide-A-Way Bumper Crane, as Specified	25	EA						
3x	Whelen LED Liberty II Solo IX 48" Light Bar, as Specified	25	EA						
3у	Light Color Option for Liberty II Solo IX 48" Light Bar	25	EA						
3z	Emergency Lighting LED Body Lights, as Specified	25	EA						
3aa	Maxon Liftgate, as Specified	25	EA						
3bb	Subfloor, as Specified	25	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
3cc	Transverse Compartment, as Specified	25	EA						
3dd	C-Tech Drawer Unit, as Specified	25	EA						
3ee	Air Compressor, 70 CFM, as Specified	25	EA						
3ff	Air Compressor, 150 CFM, as Specified	25	EA						
3gg	Go-Lights, Model 3024, as Specified	25	EA						
3hh	9' Readily Detachable Western Snow Plow System, as Specified	25	EA						
3ii	Road Department Paint Color Scheme, as Specified	25	EA						
Зјј	Winch, as Specified	25	EA						
3kk	Husky 815- Piece Mechanic's tool Set, as Specified	25	EA						
311	Truck Steel Air/Hydraulic Service Jack, as Specified	25	EA						
3mm	1700 Peak Amp 12 Volt Jumper Starter, as Specified	25	EA						
3nn	Booster Jump Set, as Specified	25	EA						
300	Special Paint Colors Not On the Standard Color Chart, as Specified	180	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
3pp	Diagnostic Tools / Test Equipment, as Specified	3	SET						
3qq	Two-Way Radio Power and Wiring Requirements for New Vehicles, as Specified	25	EA						
3rr	Installation of County Supplied Two Way Radio and Accessories, as Specified	25	EA						
3ss	Technical Support, as Specified	180	HR						
TOTAL						1	1	1	

## ITEM #4 - CURRENT MODEL YEAR, OR NEWER FOR F550 REGULAR CAB WITH PLATFORM BODY, AS SPECIFIED, OR EQUAL

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
4	Current Model Year, Or Newer, Ford F550 Regular Cab With Platform Body, As Specified, Or Equal	10	EA						
OPTIONS									
4a	Upgrade Chassis to Super Cab Chassis, retaining 60" Cab to Axle, as specified	10	EA						
4b	Upgrade Chassis to Crew Cab Chassis, retaining 60" Cab to Axle, As Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
4c	Upgrade to Regular Cab Chassis with 84" Cab to Axle, As Specified	10	EA						
4d	Upgrade to Super Cab Chassis with 84" Cab to Axle, As Specified	10	EA						
4e	Upgrade to Crew Cab Chassis with 84" Cab to Axle, as Specified	10	EA						
4f	Upgrade to Regular Cab Chassis with 108" Cab to Axle, As Specified	10	EA						
4g	Upgrade to 12' 3" Platform Body with Removable Stake For Use With 84" CA Chassis, as Specified	10	EA						
4h	Thieman TT Liftgate, as Specified	10	EA						
4i	Thieman Stow-Away Standard Tailgate Liftgate, as Specified	10	EA						
4j	Under Body Hoist For Dumping Capabilities, as Specified	10	EA						
4k	Dump- Through Liftgate, as Specified	10	EA						
41	40" Stake Sides (9' 3" Body), as Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
4m	40" Stake Sides (12' 3" Body), as Specified	10	EA						
4n	Color Option for 40" Stake Sides, as Specified	10	EA						
40	52" Stake Sides (9' 3" Body), as Specified	10	EA						
4p	52" Stake Sides (12' 3" Body), as Specified	10	EA						
4q	Color Option for 52" Stake Sides, as Specified	10	EA						
4r	40" Grain Sides (9' 3" Body), as Specified	10	EA						
4s	40" Grain Sides (12' 3" Body), as Specified	10	EA						
4t	Color Option for 40" Grain Sides, as Specified	10	EA						
4u	52" Grain Sides (9' 3" Body), as Specified	10	EA						
4v	52" Grain Sides (12' 3" Body), as Specified	10	EA						
4w	Color Option for 52" Grain Sides, as Specified	10	EA						
4x	Light Package 1, as Specified	10	EA						
4y	Light Package 2, as Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
4z	Go Light Work Lights, Model 30004ST, as Specified	10	EA						
4aa	I-Pack Tool Box, as Specified	10	EA						
4bb	30" Under Body Tool Box, as Specified	10	EA						
4cc	48" Under Body Tool Box, as Specified	10	EA						
4dd	Air Compressor, 70 CFM, as Specified	10	EA						
4ee	Air Compressor, 150 CFM, as Specified	10	EA						
4ff	Whelen LED 54" Light Bar, as Specified	10	EA						
4gg	9' Readily Detachable Western Snow Plow System, as Specified	10	EA						
4hh	Trailblazer 325 Air Pak, as Specified	10	EA						
4ii	Road Department Paint Color Scheme, as Specified	10	EA						
4jj	Slide Bar With Straps, as Specified	10	EA						
4kk	Stainless Steel V-Box Hydraulically Operated Hydraulics, as Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
411	Diagnostic Tools / Test Equipment, as Specified	3	SET						
4mm	Two-Way Radio Power and Wiring Requirements for New Vehicles, as Specified	10	EA						
4nn	Installation of County Supplied Two Way Radio and Accessories, as Specified	10	EA						
400	Technical Support, as Specified	180	HR						
TOTAL				<u> </u>					

#### ITEM #5 - CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH SWITCH-N-GO DETACHABLE TRUCK BODY SYSTEM, INCLUDING ACCESSORIES, AS SPECIFIED, OR EQUAL

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
5	Current Model Year, Or Newer, Ford F550 Regular Cab with Switch- N-Go Detachable Truck Body System, Including Accessories, As Specified, Or Equal	10	EA						
OPTIONS									
5a	9' Readily Detachable Western Snow Plow System, as Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
5b	Cirrus Hydraulics System, As Specified	10	EA						
5c	Large Stainless Steel Vbox Spreader, As Specified	10	EA						
5d	Dump Body for 11' Floor Length, As Specified	10	EA						
5e	Stainless Steel Dump Body for 11' Floor Length, As Specified	10	EA						
5f	Platform 11' Overall Floor Length, As Specified	10	EA						
5g	Medium Duty Dump Box, As Specified	10	EA						
5h	Medium Duty Dump Box, High Sides, As Specified	10	EA						
5i	Manual Tarp, As Specified	10	EA						
5j	Stake Sides and Removable Rear Stakes, As Specified	10	EA						
5k	Horizontal Split Door for Use with Chipper Top, As Specified	10	EA						
51	24" Deep Chipper Top, As Specified	10	EA						
5m	Coal Chute, As Specified	10	EA						
5n	Side Door in Drop Box, As Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
50	Mason Type Tarp, As Specified	10	EA						
5p	Split Doors for Drop Box for Chipper or Leaf Applications	10	EA						
5q	Fold Down Sides, Steel, As Specified	10	EA						
5r	Fold Down Sides, Aluminum, As Specified	10	EA						
5s	Road Department Paint Color Scheme, as Specified	10	EA						
5t	Light Package, As Specified	10	EA						
5u	Go Lights, As Specified	10	EA						
5v	Stainless Steel UTG Spreader, As Specified	10	EA						
5w	Flat Bed Service Body, As Specified	10	EA						
5x	Brine Water Tank, As Specified	10	EA						
5у	48" Under Body Tool Box, As Specified	10	EA						
5z	30" Under Body Tool Box, As Specified	10	EA						
5aa	Arbor Body, AB-11, As Specified	10	EA						
5bb	Van Body, As Specified	10	EA						

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total	No Bid	Make/Model:	Warranty:	Delivery, A.R.O.:
5cc	Work Ready Subframe, WRSF-11, As Specified	10	EA						
5dd	Maxscaper 12' Aluminum Landscaper Body Attachment, As Specified	10	EA						
5ee	Chipper Leaf Top for Landscaper, As Specified	10	EA						
5ff	Diagnostic Tools / Test Equipment, as Specified	3	SET						
5gg	Two-Way Radio Power and Wiring Requirements for New Vehicles, as Specified	10	EA						
5hh	Installation of County Supplied Two Way Radio and Accessories, as Specified	10	EA						
5ii	Technical Support, as Specified	180	HR						

Please enter the below information about the model of vehicle your company will be providing

*Manufacturer*: Click or tap here to enter text.

**Warranty:** Click or tap here to enter text.

**Delivery**, A.R.O.: Click or tap here to enter text.

**Remarks:** Click or tap here to enter text.

Click or tap here to enter text. Click or tap here to enter text.

#### <u>ITEM #2 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH 9 FOOT</u> UTILITY BODY, AS SPECIFIED, OR EQUAL

Please enter the below information about the model of vehicle your company will be providing

Manufacturer: Click or tap here to enter text.

*Warranty:* Click or tap here to enter text.

**Delivery**, A.R.O.: Click or tap here to enter text.

**Remarks:** Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

#### <u>ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL</u>

Please enter the below information about the model of vehicle your company will be providing

Manufacturer: Click or tap here to enter text.

*Warranty:* Click or tap here to enter text.

**Delivery**, A.R.O.: Click or tap here to enter text.

**Remarks:** Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

#### ITEM #4 – CURRENT MODEL YEAR, OR NEWER FORD F550 REGULAR CAB WITH PLATFORM BODY, AS SPECIFIED, OR EQUAL

Please enter the below information about the model of vehicle your company will be providing

**Manufacturer:** Click or tap here to enter text.

*Warranty:* Click or tap here to enter text.

**Delivery**, A.R.O.: Click or tap here to enter text.

**Remarks:** Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

# ITEM #5 - CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH SWITCH-N-GO DETACHABLE TRUCK BODY SYSTEM INCLUDING ACCESSORIES, AS SPECIFIED, OR EQUAL

Please enter the below information about the model of vehicle your company will be providing

*Manufacturer:* Click or tap here to enter text.

Warranty: Click or tap here to enter text.

**Delivery**, A.R.O.: Click or tap here to enter text.

**Remarks:** Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

	COMPLI	
CHASSIS SPECIFICATIONS	<u>YES</u>	<u>NO</u>
Current Model Year, or newer Ford F550 Regular Cab with Steel Dump Body	П	
Dual Rear Wheels, Four Wheel Drive		
60" Cab to Axle (CA)		
7.3L V8 gasoline engine		
40 gallon fuel tank		
TorqShift transmission with PTO option 19,000 lb. GVWR Cab shall be military grade aluminum alloy for longevity to the County		
in lieu of carbon steel		П
Frame shall be fully boxed under cab and "C" channel behind cab		
Oil life monitor, engine hour and engine idle hour meters		
Air Conditioning		
Airbags, frontal driver & passenger, side impact and side air curtains		
TowCommand integrated trailer brake controller, manual telescoping trailer tow		
mirrors		
7 wire trailer wiring harness (no plug)		Ш
AM/FM radio, SYNC4 Enhanced voice recognition communication and entertainment,		
911 Assist, AppLink 4-2" LCD Center Screen, One (1) Smart charging USB Port		
Power windows, locks, mirrors, and heated mirrors		
Center High Mount Stop Lamp		
240 amp HD alternator, 12V 750 CCA battery		
Tilt and telescoping steering wheel		
4.88 ratio limited slip axle		Ш
4 wheel power ABS brakes, front and rear disc, power steering, front and rear stabilizer bars		
Quad-beam jewel-effect halogen headlamps, five (5) roof marker lights LT225/70R19.5G BSW Traction tires – six (6)		
One (1) full sized spare tire mounted to wheel and one (1) jack		
Chrome front bumper, front tow hooks		
Chrome hub covers, front bumper grill		
Power Sliding Rear glass with defrost – sc/cc only Remote Start		
Halogen Fog Lamps		
40/20/40 split vinyl bench seat with center arm rest Auxiliary power point, six (6) upfitter switches located overhead center		Ш
Tachometer, speedometer, oil pressure, transmission temp, engine temp,		
and fuel gauge	П	
Interval windshield wipers	П	
Driver & passenger grab handles		
Standard XL Rear view camera and prep kit		
Auxiliary power point, six (6) upfitter switches located overhead center		
<b>71</b> 1 / (-/-1		

	COMPLIANCE	
CHASSIS SPECIFICATIONS (CONT'D)	<u>YES</u>	<u>NO</u>
CHASSIS SPECIFICATIONS (CONT'D) Tachometer, speedometer, oil pressure, transmission temp, engine temp, and		
fuel gauge		
Interval windshield wipers		
Driver & passenger grab handles		
Standard XL Rear view camera and prep kit Chome hub covers front bumper/grill	Ш	
3-year/36,000 mile bumper-to-bumper warranty on OE components		
5-year/60,000 mile powertrain warranty		
Shift on the fly		
Cab steps, molded black (running boards)		
Snow plow prep package		
Single color to be selected from standard color chart at time of order		
Undercoating – entire truck chassis, underside of cab and underside		
of added body (dump, utility, platform) shall be coated with Tectyl 2423 Haps		
Free Black, or Z Guard Product, a low VOC, High Solids,		
Emulsion Corrosion preventing coating		
STEEL DUMP BODY SPECIFICATION: DUMP TBEI/ELIMINATOR Dimensions:		
• 10 ga. Steel Dump Body		
• Length − 9'		
• Width – 96"		
• Inner side height – 17" high		
• Inner tailgate height – 23" high		
<ul> <li>Rated capacity: 3.3 cubic yard nominal (water level load)</li> </ul>		
• 4.5 cubic yards with 6" side extensions		
Floor and Understructure:		
Floor shall be seamless one piece design and material thickness 10 ga. high strength		
steel for minimal deflection in critical areas.	Ш	Ш
Floor sheet shall have two (2) 5/8" radius bends to complete 90° radius to		
finalize the transition from side to floor and uninterrupted look that will not hold back debris.		
The minimum floor surface width is 82"	Ш	Ш
Rear edge of floor sheet is reinforced to prohibit deflection and maintain a		
positive, long lasting tailgate seal. The understructure to be of stacked structural		
design for maximum load support.  Longsills to be 5" structural C-channel, Cross sill shall be 3" I-beam, spaced	Ш	
approximately 16" apart and reinforced with gussets.		
approximatery to apart and reminisced with gussets.		

	COMPLIA	
STEEL DUMP BODY SPECIFICATION: (CONT'D)	<u>YES</u>	<u>NO</u>
Floor and Understructure: (Cont'd)		
Rear apron shall be 8" high, full-width design and made from 10 ga high		
strength steel, Rear apron to include 3 FMVSS 108 compliant clearance lamps		
mounted in shock resistant rubber grommets to maximize bulb life.		
Body Front & Side:		
Front shall be fabricated from 10 ga. Steel.		
Front to be seamless one piece design with triple bend top rails for long term durability.		
Working height of front shall be 24" above floor, which matches rear tailgate.		
Full height front corner posts shall include clearance lights at each corner to comply		
with FMVSS 108 safety standards.		
Sides include two (2) 6" wide vertical braces per side, with continuous weldment to		
side and top and bottom rail for additional strength.		
Full depth rear corner posts to be 11.6" wide and 5" deep with hardware concealed		
for a clean streamlined look.		
Double walled design, single-walled <b>NOT ACCEPTABLE</b> .  Sides are equipped with front and rear 6" board pockets with retaining holes,		Ш
board pockets are designed for 2" nominal lumber		
board pockets are designed for 2 monthlar fulfiber		
Tailgate:		
Shall be fabricated from 10 gauge steel with fully boxed dirt shedding top and bottom		
rails and incorporates 2 vertical braces to provide additional strength and rigidity.		
Tailgate shall be recessed flush with rear edge of corner post		
Tailgate shall be of double acting design incorporating Rugby's patented E-Z LATCH system with cam action to draw in annoying miss-aligned upper tailgate pins.		
E-Z LATCHES are easily accessible from the ground and are located on sides of left		
and right corner posts to promote operator safety, center latches are not acceptable.		
Latch system is permanently connected to the body, so that tailgate pins cannot be stolen		
or lost. Latch system does not have an internal linkage that would require the removal		
of panels to repair or replace.		
The lower tailgate latch release handle is located at the left front corner of the body		
for quick access		
Tailgate top pins are 1.25" and bottom pins are 1.00" diameter		
Shall include 1/4" proof coil chain and banjo eye slotted holders in corner posts to	_	
allow the tailgate to lay flush with the floor and for spreading applications.		
Lights/Wiring:		
All lamps/reflectors exceed FMVSS 108 requirements.		
Lamps shall be LED flush mounted in shock resistant rubber grommets to maximize	_	_
bulb life.		

(000.100)	<b>COMPL</b>	IANCE
	<b>YES</b>	<u>NO</u>
STEEL DUMP BODY SPECIFICATION: (CONT'D)		
Lights and Wiring: (Cont'd) Each rear corner post shall include a rear facing auxiliary stop/turn lamp LED for		
improved visibility and operator's safety.	П	
Color-coded wire harnesses are provided to minimize installation time and	_	_
simplify diagnosis.		
Body up light in cab.		
Cabshield:		
1.27 Fabricated from 10 ga. steel, slotted viewing window. Design to be ½ cabshield and non tapered.		
Hoist: SR4020		
Rugby's SR series line of subframe scissor hoists are designed to reduce installation time and make hoist application easier. Built with an incorporated body prop and table top rear hinge, subframes are available to accommodate 60" CA and 84" CA		
chassis.		
NTEA rated and classified class 40: ISO Certified.		
The hoist shall be an NTEA approved scissor design. Approx weight: 650 #		
Hoist shall be fabricated of high strength steel.		
Single Cylinder		
Bore 5.5"		
Stroke 20"		
Mounting Height 10.5"		
CA./CT 60" – 108"		
Capacity Range 9.6 – 13.3 Tons		
Hydraulically operated run off the chassis PTO		
ACCESSORIES		
Sleeve adapter Part # HCZ-19H282-A, or equal		
Manual pull tarp system with mesh tarp		
Pintle plate <sup>3</sup> / <sub>4</sub> " thick with:  • Class V receiver hitch		
<ul> <li>Pollak 7 pole RV style harness and twist and lock plug</li> </ul>		
• (Harness Part #11-998, or equal/7-Way Plug Part #11-916P, or equal)		
• 102 dB Preco backup alarm		
• 3-ball receiver tube 1 7/8", 2", 2 5/16" locking hitch pin		
• 6-ton receiver mount pintle & 2" ball combination hitch		

	COMPL	
ACCESSORIES (Cont'd)	<u>YES</u>	<u>NO</u>
Two (2) pull out ladders mounted behind the cab. Grab handle mounted to work in conjunction with ladders		
Stone shields and mud flaps		
<ul> <li>LED strobe system:</li> <li>Four (4) oval strobe lights to be mounted in cab shield</li> <li>Two (2) facing forward</li> <li>One (1) on each side of cab shield</li> <li>Two (2) facing rear in rear corner posts</li> </ul>	П	П
6" high oak boards covered in aluminum diamond plate		_
o liigh oak boards covered in arunnhum diamond plate		
LED spreader light		
Spreader chain kit		
DOT safety kit, first aid kit, 10 lb. fire extinguisher with bracket and safety triangles		
Amber Atomic LED Lights		
Conspicuity enhancement:  • 2" red and white diamond grade reflective striping  • 6" red and yellow inverted V in face of tailgate		
OPTIONS 1A. Upgrade chassis to Super Cab chassis, retaining 60" Cab to Axle		
1B. <u>Upgrade chassis to Crew Cab chassis, retaining 60" Cab to Axle</u>		
1C. Upgrade to Regular Cab chassis with 84" Cab to Axle		
1D. <u>Upgrade to Super Cab chassis with 84" Cab to Axle</u>		
1E. <u>Upgrade to Crew Cab chassis with 84" Cab to Axle</u>		
1F. Fold Down Sides on Standard Dump Body		
1G. <u>Stainless Steel Body Upgrade Dimensions</u> DynaPro by DeJana fixed side steel dump body, as specified or equal		
Material: stainless steel, specifically ASTM A240 type 201 stainless steel having a minimum yield strength of 52,900 psi.		

(0.00.000.0000.0000000000000000000	COMPLIA	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1G. Stainless Steel Body Upgrade Dimensions (Cont'd)		
Finish 2B cold rolled standard surface finish, free of scratches & surface defects on all exterior visible surfaces.		
<ul> <li>Dimensions/Capacity</li> <li>Body Length: 9' in length</li> <li>Body Width: 95.7" exterior width, 85.7" interior usable width.</li> <li>Side Height: interior wall height of 16"</li> <li>Head Sheet Height: 23" interior head sheet height, all models.</li> <li>Tailgate Height: exterior tailgate height of 24.6". Interior tailgate height of 21.3"</li> <li>Dump body capacity (water level loading): 9' x 16" side height; 3.2 cubic yards.</li> </ul>		
Materials/Construction: Body Sides and Head Sheet The dump body sides shall be fixed in place and fabricated from 10- gauge inner panel/ 12-gauge outer panel ASTM A240 type 201 stainless steel having a minimum yield strength of 52,900 psi.		
The dump body head sheet shall be fabricated from ASTM A240 type 201 stainless steel having a minimum yield strength of 52,900 psi.		
Dump body side lower rub rails shall have a 45° slope for a self-cleaning design		
Dump body upper top rails shall have a 31° slope as a dirt & debris shedding feature.		
The fixed dump body sides shall be a double-walled design and have front and rear boxed corner posts.		
Materials/Construction: Body Sides and Head Sheet (Cont'd) The dump body sides shall have 6" tall formed 10-gauge steel board pocket extensions welded in place. Approximate 4.2 cubic yard heaped load		
All welds on sides and head sheet shall be "continuous" to prevent entrance and entrapment) of moisture.		
Materials/Construction: Floor & Understructure The one-piece dump body floor sheet shall be 3/16" AR400F abrasion resistant carbon steel plate having a minimum yield strength of 150,000 psi.		
The dump body floor shall have a minimum 45-degree angle debris shedding chamfer at the side walls and the side wall sheets shall lap the floor sheet by approximately 2".		

(	<b>COMPL</b>	<b>IANCE</b>
OPTIONS (CONT'D)	<u>YES</u>	<u>NO</u>
1G. <u>Stainless Steel Body Upgrade Dimension</u> (Cont'd)		
Materials/Construction: Floor & Understructure (Cont'd) The understructure shall be a crossmember-less boxed trapezoidal longsill design, with 10-gauge steel longsills. Longsills to be 8" in height, and continuously welded in order to unitize the body structure.		
The rear of the dump body shall be reinforced with a full width skirt panel supporting the rear of the floor and welded to both the longsills and rear corner posts.		
Materials/Construction: Tailgate & Cabshield The double-walled tailgate shall be 10-gauge inner panel/ 12-gauge outer panel ASTM A240 type 201 stainless steel having a minimum yield strength of 52,900 psi.		
The tailgate upper and lower rails shall be sloped 45° for self-cleaning.		
Tailgate and rear corner posts to be sloped inwards by 6° for a sleek appearance and to aid in self-closing against the upper tailgate pin sockets.		
The tail gate shall also have fully boxed end sections for added strength and incorporate 1-1/4" diameter upper & lower tailgate pins.		
Double chain guide pockets on each side of the tailgate. 5/16" transportation grade chain with sleeving to protect the body surface finish.		
There will be sufficient chain to allow the tailgate to lay flat (flush) with the dump body floor when hinged open at the bottom.		
Dump body rear corner posts shall have "banjo eye" slotted chain keepers.		
The lower tailgate latches shall be retractable type safety latches and incorporate a "toe keeper" feature.		
The lower tailgate latches shall stay locked via a control rod lever and a manual over-center release lever located at the roadside front of the body.		
The upper tailgate latches shall be independent and manually operated via hinged capture clamps. A sliding rod lock shall be used on both upper latches to positively lock and secure the tailgate in place.		
Tarp rod accommodation hooks built into the tailgate upper latch mount plates.		
The cab shield shall be 10-gauge ASTM A240 type 201 stainless steel having a minimum yield strength of 52,900 psi.		

	COMPL YES	LIANCE NO
OPTIONS (CONT'D)  1G. Stainless Steel Body Upgrade Dimension (Cont'd)  Materials/Construction: Tailgate & Cabshield (Cont'd)  The cab shield shall be 95.5" inches wide, of a straight-sided design, and shall	<u>125</u>	110
project over the cab a nominal 22" 1/2 cab.		
The cab shield shall be modular in design and easily service replaceable.		
A ventilated window shall be cut into the center of the cab shield bulkhead sheet.		
Hoist/Subframe The scissor hoist shall meet NTEA Class D/40 performance requirements.		
A suitable full-length support subframe with tabletop rear hinge blocks shall be provided.		
The scissor hoist shall have an integral safety body prop and have grease zerk accommodations at all points of rotational motion.		
Scissor hoist range of motion to be a maximum dump angle of $50^{\circ}$		
The hoist cylinder shall be a single-stage 5.5" diameter housing x 16" stroke ram with a 2" diameter chrome moly piston rod.		
Hoist operating capacity by design to be a maximum of 11.4 tons (9' body, 6" overhang)		
Hoist to be operated by direct mount PTO and pump. PTO must be a Chelsea 210 with direct mount pump and 9 gallon reservoir providing up to 4 gallons per minute.		
Shall be operated by a rocker switch on the dash		
Finish Painted to match cab; base coat/clear coat		
1H. Stainless Steel Fold Down Sides for Stainless Steel Body Option		
11. <u>Body Paint Option for Stainless Steel Body Upgrade</u> Body finish color shall match cab color, base coat and clear coat.		
<b>1J. <u>Central Hydraulic System Hydraulic Pump</u></b> Hydraulic pump and PTO shall be a Chelsea 210 series.		
The pump shall be a gear pump that is direct mounted to a hotshift PTO for a live transmission with gasoline engine		

	<b>COMPL</b>	IANCE
ORTIONS (CONTYD)	<b>YES</b>	<u>NO</u>
OPTIONS (CONT'D) 1J. Central Hydraulic System Hydraulic Pump (Cont'd)		
The pump shall have a flow rate of 10.6 GPM at 1200 engine RPM The pump shall have a <sup>3</sup> / <sub>4</sub> " 11T splined drive shaft		
The suction hose to the pump shall be a minimum of 1 1/4" I.D. SAE 100-R4 hose		
The PTO shall be a Parker/Chelsea 210 series and have a ratio of 144%		
Heat shield to protect PTO wiring		
The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch		
In power over speed protection required		
Modular Manifold Central Hydraulic System  The central hydraulic valve system shall be a mobile design to withstand exposure to deicing chemicals and severe weather conditions with a 5-year warranty on all hydraulic components		
The central hydraulic valve system shall be specifically designed for low volume hydraulic pump output		
All implements will function simultaneously		
The modular manifold must be constructed of 6061 anodized aluminum material		
The modular manifold shall be adjustable to a maximum pressure of 3,500 PSI with multiple flow and pressure performance and with function configuration		
The modular manifold will consist of multiple sections bolted together for multiple function configurations		
The entire hydraulic system shall be completely serviceable without removing from the enclosure or disassembling the sections		
A one-piece manifold will not meet the intent of the specification for easy maintenance and service		
The modular manifold must be capable of operating in either open center (fixed displacement) or closed center (variable displacement) hydraulic circuits		

	<u>COMP</u> YES	LIANCE NO
OPTIONS (Cont'd)	<u>113</u>	110
1J. Central Hydraulic System Hydraulic Pump (Cont'd)  Madular Manifold Control Hydraulic System (Cont'd)		
Modular Manifold Central Hydraulic System (Cont'd) All functions will be proportional controlled, pulse width modulated, and pressure		
and flow compensated with counter-balance		
Each function will have load holding with no internal leak-down		
Implements shall not drift down during vehicle travel		
Heavy duty 12VDC coils must be protected with a corrosion resistant coating		
All coils must be rated for a 1000-hour salt spray as standard		
Connections must be NEMA x6 standards for dust protection		
Outside the cab connections shall be rated as NEMA "x8" – protected against the		
effects of permanent submersion in water as well as able to show no corrosion	_	_
after 500 hours in a 35°C salt spray		
The modular manifold shall be designed for lower pump capacity hydraulic		
pumps (belt and gear)		
Each section will have flow capacities from 3 to 20 GPM with load holding		
on all cylinder sections		
All cylinder sections shall be load hold with A and B port relief as standard		
The hoist section shall be 6 GPM, four way for a double acting cylinder and		
incorporate a 500 PSI relief and load hold		
The spinner will be a 7 GPM motor spool cartridge and the auger/conveyor will		
be a 7 GPM motor spool cartridge		
The spinner or auger will not stop or slow when other implements are actuated		
Each function will be equipped with adjustable manual overrides protected by		
jacketed debris covers		
The hydraulic system shall be pressure and flow tested before the installation		
process		

OPTIONS (Cont'd)	<u>COMPL</u> <u>YES</u>	IANCE NO
1J. <u>Central Hydraulic System Hydraulic Pump (Cont'd)</u> Granular Spreader and Single Stick Plow Controls		
The spreader controls shall be capable of operating a granular spreader with auger/ conveyor, spinner and pre-wet (or anti-ice) output channels		
Each function can be operated individually or all simultaneously		
In-cab controller must be an automotive grade product (amusement/gaming type products are <b>NOT ACCEPTABLE</b> )		
The liquid channel can operate an electric or hydraulic pre-wet system		
Controller shall also have an optional dash mount, stand-alone, or console mounting options		
Operator shall have the ability to adjust the speed of each function and the amount of granular material or liquid with the soft touch key pad		
Printed PVC soft touch membrane switch interface shall be tested to 5 million impressions for long life and durability		
Touch pad to control granular feed rate/spinner speed		
All set-up and programming shall be completed using the controller soft key pad with no programming keyboard		
Controller shall have the ability to connect the feed rate and spinner function for single stroke simultaneous start up		
Controller must offer a "Spot Blast" feature. Spot Blast will activate the blast with a single keystroke when the controller is paused		
Adjustable valve unseat mode must be a standard feature		
Spinner increase during Blast shall be an adjustable option		
Spreader control shall be capable of operating each function in open loop mode		
With a single switch setting, spreader shall be field configurable to operate either:  • Ground Speed Oriented OR		
<ul> <li>No Ground Speed (simple manual operation)</li> </ul>		
Controller shall also offer programmable Blast Features that will function during Ground Speed Triggered Operation		

OPTIONS (Cont2d)	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd)  1J. Central Hydraulic System Hydraulic Pump (Cont'd)  Granular Spreader and Single Stick Plow Controls (Cont'd)  Controller must include integrated protection and diagnostic systems with safety features incorporated into the system		
PowerSafe Wiring Design: For safety reasons, grounding or cutting any wire at any point between any valve coil and the controller must not cause any valve to actuate		
One lead from each hydraulic valve coil must be wired to a common ground point		
System shall be capable of self-diagnosis using the pause indicator LED light		
System must supply pulsed +12 volt power to the other lead from each individual valve coil		
All connections inside the hydraulic valve/electronic control junction box must be IP 68 rated		
All connectors shall be rated as "6x" – dust proof		
All connectors shall be rated as "x8" – protected against the effects of permanent submersion in water as well as showing no corrosion after 500 hours in a 35°C salt spray		
System operating temperature range -4 to +104°F (-20° to +40°C)		
All connections shall be labeled with appropriate descriptions for each connection to individual solenoids of the hydraulic actuating cylinders		
Cirus EZ1 Controller shall have a five (5) year warranty		
Certified Cirus Lamprey Plow/Hoist Controller In-cab control system shall have one (1) fully proportional multi-function joystick		
Joystick shall be Hall Effect (magnetic) with no magnetic contacts (amusement/gaming joysticks are <b>NOT ACCEPTABLE</b> )		
Hoist joystick console shall mount to the center seat in the down position with Two (2) adjustable rods that slide into the head rest mounting holes		
Dash mounted momentary hoist switch shall be available when seat mounted controls are removed		

OPTIONS (Cont'd)	COMPLIAN YES	NCE NO
1J. <u>Central Hydraulic System Hydraulic Pump</u> (Cont'd) Certified Cirus Lamprey Plow/Hoist Controller (Cont'd)		
Dump body hoist shall be controlled by a single joystick		
Hoist control lever must have a safety trigger protection for the hoist function		
Control lever will include a programmable plow float function (free-floating system requires a single acting valve)		
Operator shall have the ability to set the rate of speed for each direction of motion on a PC for all hydraulic devices controlled by the joystick without modification to the hydraulic system		
Controller shall include integrated protection and diagnosis systems with safety features incorporated into the system		
Channel Safe: protects the system and helps diagnose external shorted or open circuits		
SafeStik that shuts down the output channels if a joystick fails		
PowerSafe Wiring Design: For safety reasons, grounding or cutting any wire at any point between any valve coil and the controller must not cause any valve to actuate		
One (1) lead from each hydraulic valve coil must be wired to a common ground point		
System must supply pulsed +12 volt power to the other lead from each individual valve coil		
All connections at the hydraulic control junction box must be IP 68 rated		
Outside the cab harness will be IP 68 rated up to the valve coil connection		
All connectors shall be rated as "6x" – dust proof		
All connectors shall be rated as "x8" – protected against the effects of permanent		
Submersion in water as well as showing no corrosion after 500 hours in a 35°C salt spray		
System operation temperature range -4 to +104°F (-20° to +40°C)		
All connections shall be labeled with appropriate descriptions for each connection to individual solenoids of the hydraulic actuating cylinders		

OPTIONS (Cont'd)	<u>COMPLIAI</u> <u>YES</u>	NCE NO
1J. Central Hydraulic System Hydraulic Pump (Cont'd) Certified Cirus Lamprey Plow/Hoist Controller (Cont'd) Installing vendor must be authorized to perform warranty repairs and periodic maintenance on Cirus products		
Stainless Steel Reservoir/Valve Enclosure Valve sections and manifold shall be mounted in a 304 stainless steel combination reservoir and enclosure		
Overall width of the combo shall not exceed 27.66 inches		
Enclosure shall be constructed in such a manner that any required maintenance or repair of the valves can be accomplished without obstruction		
Valve mount plate shall slide forward for work port access		
Enclosure shall be mounted with a minimum of 1" frame clearance on each side of the combo		
Reservoir shall have a 14 gallon capacity		
Reservoir/Valve Enclosure shall be designed to mount on either side of vehicle chassis		
Enclosure must have hydraulic hose hangers to route and protect hydraulic hoses		
Reservoir/Tank shall be constructed from 10 gauge 304 stainless steel with 0.25 inch steel bracing with 14 gauge cover		
Reservoir filler cap must be angled for easy fill		
Two rubber latches shall secure the enclosure lid and the lid must be removable without tools by one person		
The rubber latches shall be replaceable with a removable pin		
Tank return line shall be mounted internally with case drain and level sensor ports available on both sides of tank		
Tank shall have a basket type breather cap and ¾" magnetic drain plug		
Suction line shall be 1 1/4" strainer NPT with 1 1/4" full flow brass ball valve		
Suction line shall also have a 100 mesh stainless steel strainer		

		COMPLIANCE	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
1J. Central Hydraulic System Hydraulic Pump (Cont'd)			
Stainless Steel Reservoir/Valve Enclosure (Cont'd) Return line must be a minimum of 1 1/4" NPT with 10 micron filter and 25 psi bypass with gauge			
Hoses and Fittings Suction line between reservoir and pump shall be minimum of 1 ½" ID with a minimum SAE 100-R4 rating and shall be secured on both ends via heavy duty banding straps (radiator hose clamps are NOT ACCEPTABLE)			
Hydraulic lines and plumbing shall be of sufficient capacity so as not to create heat or turbulence within hydraulic system			
Pressure hoses, including signal sense to pump, shall have swivel fittings on both ends and have a minimum SAE 100-R2 rating			
Return lines and case drain shall have a minimum SAE 100-R1 rating			
Hydraulic lines shall be routed to minimize interference with equipment and chassis components requiring periodic servicing			
Support brackets, grommets, and tie wraps shall be provided where appropriate to protect lines from damage by abrasions, cutting or impact			
Quick disconnects shall be stainless steel			
Hoses shall not be routed near exhaust manifold pipes, bolts, sharp edges and exhaust system to prevent wear, fatigue or fire			
Pipe fittings are not acceptable in any high-pressure line			
Maximum distance between support clamps on all hydraulic lines shall be 24 inches All hoses must be encased in high temperature fiberglass rubber sleeve by high heat areas or high wear areas, <b>NO EXCEPTIONS</b>			
1K. Stainless Steel UTG Spreader General 6" auger under-tailgate spreader shall be of the bottom-opening design, with a safety shut off feature built into the hydraulic system			
Mounting shall allow the dumping of materials without interference from the spreader			
Maximum spreader width shall be 96"			

	<b>COMPLIANCE</b>	
	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd) 1K. Stainless Steel UTG Spreader General (Cont'd)		
Mounting		
Unit shall mount to the sides and below the floor level of the dump box with single-pin, quick-detachable hardware		
Mounting and removing shall be done without the use of any special tools		
Safety Shut Off		
Spreader shall incorporate a hydraulic safety shut-off feature that disables the hydraulic functions of the spreader		
Safety Shut-off feature shall prevent opening the bottom door or opening the top cover beyond a vertical position when the hydraulics are engaged		
Feed Mechanism		
6" heavy-duty auger shall consist of 3/8" flighting with 4" pitch which is welded to a 2 3/8" O.D. Schedule 40 pipe		
Auger shall have continuous and reverse flighting for more uniform emptying and shall be supported by 1 1/4" steel shaft ends		
Auger shaft shall be supported on one end in sealed, self-aligning, precision single- row radial bearings with grease fittings and on the other end by the drive mechanism		
Auger shall be powered with a 22.6 cubic inch displacement hydraulic motor capable of delivering high torque at low speeds mounted to the end plate and		
directly coupled to the auger by a non-corrosive UHMW polyethylene sleeve and a ½" Grade 5 bolt		
Discharge port shall be located 24" from the left end		
Stainless Steel Hopper		
Rigid one-piece end plates of 7 gauge stainless steel shall be continuously welded to an auger trough of 7 gauge stainless steel		
Unit shall have a three-point hinged bottom pan that will expose the entire auger for easy clean out		
Dettem Device shall be foliviously of 7 course statements to 1 and 1 and 1		
Bottom Pan shall be fabricated of 7 gauge stainless steel and held in place with two (2) heavy-duty cam locks with a lifting handle near each lock for ease of use		

	<u>COMPL</u> <u>YES</u>	IANCE NO
<u>OPTIONS</u> (Cont'd) 1K. <u>Stainless Steel UTG Spreader General (</u> Cont'd)		
Stainless Steel Hopper (Cont'd)		
Anti-spill cover over each discharge opening shall be of 7 gauge stainless steel and shall be removable without the use of tools		
Lid shall be of 7 gauge stainless steel and shall be an integral part of the unit that may be raised when spreading or lowered when dumping		
Lid shall be locked in position by two (2) latches that are replaceable		
Minimum inside width of the trough shall 10 7/8"		
<b>Poly Spinner Disc</b> Shall consist of a single 18" diameter polymer disc with six (6) formed polymer fins, to provide a flat trajectory and uniform spreading pattern from 4 to 40 feet		
Assembly shall be adjustable, allowing for variable spreading patterns left, center, or right by sliding the hinged frame sideways on the shaft so that the point at which the material hits the spinner disc is varied		
Assembly shall be adjustable in height, providing four (4) different ground clearance settings by means of four (4) bolts		
Assembly shall be easily removed by pulling two pins and uncoupling two (2) hydraulic quick-disconnect hoses		
Speed rate shall be variable through optional valve systems		
Shall be mounted directly onto the hydraulic motor shaft by means of a steel spinner hub		
Motor shall be 2.8 cubic inches with nickel plated shaft for enhanced corrosion		
Resistance and improved seal life		
Assembly shall remain horizontal to the road at all dump box angles		
Shield shall be provided to prevent material from striking the truck		

	COMPLIANC	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1K. Stainless Steel UTG Spreader General (Cont'd) Finish		
All carbon steel components shall be painted black		
Stainless steel components shall be left in their natural finish		
Spill Shields Shall be made of steel and mounted to tailgate to stop any salt from spilling over the sides or the rear of the body		
Dump Accessibility NO hydraulic hoses or trough handles shall be above the surface of the spreader		
Clean dumping surface must be provided		
1L. <u>Dump-Through Liftgate</u> Anthony Liftgates Model #AR-DT 1800, or equal, dump-through liftgate		
Durable roller chain drive		
Marine duty potted toggle switch Pressure compensated flow valve		
Circuit protection		
Level ride platform 3-step powder coat		
Two (2) year mechanical and Two (2) year electrical and hydraulic parts and labor warranty		
90" platform width Cab cut off switch		
1M. <u>I-Pack Tool Box</u> Knapheide I-Pack Tool Box mounted between cab and dump body		
Painted to match cab color, base coat and clear coat		
Requires chassis to have an 84" Cab to Axle measurement		
Stainless steel continuous hinges, no exception		
14 gauge Galvaneal shell, E-coat primer, and latches with ABS pans for superior corrosion resistance		

		<b>COMPLIANCE</b>	
OPTIONS (Cont'd)	<b>YES</b>	<u>NO</u>	
1N. ProTech Aluminum I-Pack with Stainless Steel Doors PN # 20-2737			
10. 30" Under Body Tool Box For use with chassis with 60" CA			
Weatherguard Tread Plate Aluminum 631-0-02			
Dimensions: 30 1/8" x 18" x 18"; 5.4 cubic feet			
Door opening: 13 ½" H X 25 ¼" W Stainless steel D-handles			
1P. Stainless Steel V-Box General (NOTE: This option requires the Central Hydraulic System)			
This specification describes a self-contained hopper spreader designed to spread free-flowing material up to 40 feet. Spreader consists of a steel hopper and spinner assembly, pintle-chain conveyor system, a choice of hydraulic or engine drive power systems and all components required to deliver maximum performance			
<b>Hopper</b> Shall be 9 ft, 44 in, and 70 in inside width			
Hopper sides shall slope at a 45° angle			
Capacity of the unit shall be 4.0 cubic yards struck			
Hopper sides and longitudinals shall be formed of one piece and shall all be of 12 gauge 201 stainless steel continuously welded on the inside of the hopper (Welding on the outside is <b>NOT ACCEPTABLE</b> )			
Each hopper side shall be supported by three (3) full slope body side supports on each side			
12-gauge 201 stainless steel front and rear panels			
Top edge shall be double crimped for additional support			
Adjustable feed gate with a maximum opening of 4 ½" x 9" shall be able to be clamped to allow for a positive gate setting			
A heavy duty lift shall be supplied in each corner of the hopper			

	<u>COMPL</u> YES	IANCE NO
OPTIONS (Cont'd)  1D. Stainley Start V. Box Consul (Cont'd)	113	110
1P. <u>Stainless Steel V-Box General</u> (Cont'd) Conveyor		
Shall be of the chain barflight type Conveyor section of body shall be 16" wide		
Pintle-type chain with a tensile strength of 12,500 lbs Cross bars to be $\frac{1}{4}$ " x 1" welded on 4 5/8" centers		
Conveyor to be driven by a 20:1 ratio cast-bronze worm gear		
Drive sprockets shall be drop-forged, six-tooth keyed to the minimum 1 1/4"		
C1045 steel alloy drive shaft		
Idler shaft shall be 1"		
Schedule 40 pipe, and shall be equipped with poly idler "sprockets"		
Chain adjustment shall be accomplished with two (2) threaded block and rod assemblies		
Floor shall be 12-gauge 201 stainless steel of flange-type construction		
Spinner Assembly Polyurethane spinner disc shall be 13" in diameter		
Four (4) formed fins that will give a uniform trajectory from 4 to 40 feet		
Shall have two (2) adjustable 201 stainless steel internal baffles		
Four (4) 201 stainless steel external overlapping baffles to control the direction and width of the spread		
All spinner baffles shall be adjustable without the use of tools		
Inverted V A 12-gauge 201 stainless steel protective inverted-V shall be installed above the conveyor to reduce load pressure and prevent material bridging		
Top Screens Two section center hinged top screen shall be provided to protect the conveyor chain and spinner from large objects		

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd)		
1P. <u>Stainless Steel V-Box General</u> (Cont'd) Top Screens (Cont'd)		
Screen sections shall be made of 5/16" rods, with square opening of 2 ½", and		
framed by flat bars, and angle iron steel		
Paint		
All mild steel components shall be painted black		
Spinner Assembly Motor		
Shall be powered by an additional hydraulic motor, providing independent	_	_
control over each motor		
Hydraulics		
Unit will be run off of the Central Hydraulic System which will have a key pad control to operate the speed of the conveyor and spinner	П	
control to operate the speed of the conveyor and spinner		
Unit will run off of the live drive transmission. NO belt systems		
1Q. Spreader Leg Stand Kit PN #3037295		
Accommodates 10' spreaders		
1R. Air Compressor, 70 CFM		
VMAC VR70 Underhood Rotary Screw Compressor 70 CFM, 175 PSI		
3 gallon receiver tank Control panel Throttle control		
Filter/Regulator/Lubricator		П
The/Regulator/Lubricator		Ш
Relief/Shut-Off valves with all required fittings Hose Reel: 50' of ½" I.D. air line		
1S. Air Compressor, 150 CFM		
VMAC VR150 Underhood Rotary Screw Compressor 150 CFM, 175 PSI		
3 gallon receiver tank		Ш
Control panel Throttle control		
Filter/Regulator/Lubricator		
Relief/Shut-Off valves with all required fittings	Ш	
Hose Reel: 50' of ½" I.D. air line		

	COMPL VES	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1T. Go-Lights, Model 30264 Go Light Stryker Work Lights (Up to two (2) per vehicle)		
Permanently mounted on brackets on I-Pack tool box (I-Pack tool box Option MUST be selected)		
6000 maximum lumens		
5 amp draw		
9-32 VDC input		
1U. 9' Readily Detachable Western Snow Plow System		
Blade Assembly Moldboard – 12 gauge (0.104") steel sheet formed to a 17.3" radius with a 1.76" diameter top curl		
Ribs – Eight (8), 0.25" thick, variable profile, electrically welded to sheet, torsion tube and 0.25" thick, high strength steel base channel		
Torsion Tube – 2" diameter, full width, electrically welded to all eight ribs		
Cutting Edge – Reversible 0.5" x 6" high carbon steel C1080 attached with ten (10) 0.63" Grade 5 carriage bolts		
Disc Shoes – Two (2), full rotation, height adjustable, Austempered Ductile Iron shoes with integral 1" diameter shaft secured to blade with lynch pins.		
Shoe brackets shall be welded to vertical ribs		
Blade Trip – 50° full blade trip		
Blade Assembly Trip Springs – Four (4), 2.38" OD x 0.39" diameter, C1060, hard drawn, stress relieved wire, preloaded, with 0.63" x 4" eyebolts		
Shock Absorbers – Two (2), 5" stroke, shielded shock absorbers to retard extension velocity and dampen blade trip return		
Blade Trip Pivot – Three (3) 0.75" diameter steel pins		
Blade Guides – Two (2) highly visible, vinyl coated, spring wound, with replaceable flags		

· `		COMPLIANCE VES NO	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
1U. 9' Readily Detachable Western Snow Plow System (Cont'd)			
Blade Assembly (Cont'd)			
Plow Angling – 30° right and left			
<b>A-Frame</b> Electrically welded, reinforced, 3" x 3" x 0.19" wall structural steel side tubes with 0.50" thick, formed nose plate, and integral attachments for angling rams to receive 1" diameter pins			
Lift Chains – Two (2), 0.25" Grade 43 high test steel with 2,600 lb. working load limit, attached with 0.38" U-bolts			
Quadrant Electrically welded, reinforced, 5" OD x 0.25" wall structural steel tube with 0.50" thick nose plates and integral attachments for angling rams to receive 1" diameter pins			
A-Frame to Quadrant Angle Pivot – 1" diameter Grade 5 bolt			
Lift Frame Lift frame to have provision for attachment of out front hydraulics and light kit			
Lift Arm – 0.25" x 2" formed bar welded with a 7 gauge steel cover			
Two Plow Stands – Self-storing and adjustable integrated into the plow attachment mechanism. Connecting hook and lever with integral 0.50" lock pin			
Lift Frame – Two piece lift frame with tubular construction.			
Lower lift frame to include drive in plow alignment horns			
<b>Mount</b> Custom designed, electrically welded, structural steel mounting readily adaptable to truck frame.			
Attached to truck with Grade 5 fasteners			
Vehicle, with mount attached, shall meet Federal Motor Vehicle Safety Standards by compliance or by vehicle manufacturing approval			
Removable receiver brackets for additional ground clearance			

#### <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL DUMP BODY, AS SPECIFIED, OR EQUAL (CONT'D)</u>

	COMPLIANCE	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1U. 9' Readily Detachable Western Snow Plow System (Cont'd)		
Paint Plow blade shall be made of shot blasted steel and cleaned with phosphate solutions and have baked-on red polyester powder coating		
Hydraulics Electric solenoid activated and detachable with lift		
Front mounted hydraulic unit consisting of a fixed displacement gear pump, with 1750 PSI system relief, direct tang driven by a 4 ½" 12 volt DC motor		
Pump with filter screen shall be immersed in a steel deep drawn reservoir		
Main valve manifold shall contain three (3) side mounted and covered solenoid cartridge valves		
Cushion relief valves set at 4,000 PSI and a quill adjustment screw to adjust blade drop speed		
One (1) 1 ½" x 8" lift ram and two (2) 1 1/2" x 12" angling rams each with a rod seal, a wiper ring and a packing nut		
Hydraulic hoses shall be 1/4" steel braided SAE 100R1		
Hydraulic unit shall be controlled by a soft touch, hand held in-cab control		
Control shall be equipped with an on/off, mode buttons and indicator lights		
Control shall be dash mounted		
Control shall provide a single button movement of angle right or left (hydraulically locked)		
In-cab control shall be connected to valve manifold and to the motor through an auxiliary 12-volt multiplexed harness. Power and control harness to have quick disconnects and covers at the grill		
Control shall allow plow to be in float when lowered		
Unit shall be a "low side" drive system, which provides positive potential continuously with a switched ground to control the solenoids		

#### <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL</u> DUMP BODY, AS SPECIFIED, OR EQUAL (CONT'D)

( • • • · · · · · · · · · · · · · · · ·	COMPLIANCE VES NO	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1U. 9' Readily Detachable Western Snow Plow System (Cont'd)		
Hydraulics (Cont'd)		
Unit shall possess programmable security lockout feature		
Unit shall possess programmable hydraulic soft stop feature		
Unit shall possess programmable one touch float feature		
Hydraulic fluid shall be MIL5606 equivalent standard transmission fluid (ATF) oraircraft hydraulic oil for low-temperature operation		
Cycle times: Lift, 2.0 seconds; Angle, 1.5 seconds		
Hydraulic unit shall stay with plow when plow is disconnected from truck		
<b>Lights</b> Night Hawk LED Head Lamps		
Headlights Comprised entirely of light emitting diodes using solid optic elements for low beam and high beam lights		
A reflected LED light for the side lighting using EdgeView Technology		
DRL/Park lights using white lights behind a frosted filter, turn signal utilizing amber lights behind the same frosted filter		
Plow Removal Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit, shall be easily removed as one complete unit		
Accessories with Plow Snow deflector		
Curb guard right and left		
Cab command Hand Held Control/Joystick (Shall be specified at time of order)	П	П

	<b>COMPLIANCE</b>	
	<u>YES</u>	<u>NO</u>
OPTIONS (Cont'd)		
1V. Poly Electric Spreader Dimensions		
Outside Hopper 103" L     Outside Hopper 63" W		
<ul><li>Outside Hopper 63" W</li><li>Overall Spreader 117" L</li></ul>		
Overall Spreader 51" H		
<u>-</u>		
• Capacity shall be 2.5 cubic yards		
• Empty Weight 734 lbs		
Poly Hopper Construction		
Shall be constructed of rotationally molded 1/4" thick double walled		
polyethylene shell, 46° sloped sides with six (6) molded side support ribs		
for joint from the composition of the composition o	_	_
Molded rear "feet" for ease of removal, cleaning and storage		
Shall include standard 2-piece hinged, double-walled, overlapping domed		
hard plastic covers that double as spill guards		
Conveyor Drive Bed		
Shall be 100% constructed of 10 gauge 201 stainless steel with a 16 <sup>3</sup> / <sub>4</sub> "		
wide pintle chain conveyor system	П	
wide pintie chain conveyor system	Ш	
Dual Motor Drive		
One motor shall be a sealed ½ HP – 12VDC capacity with an 11-tooth drive		
sprocket powering a #40 roller chain to gearbox which allows for independent		
pintle chain speed control		
Samanata 1/2 IID matan dadigatad ta mayyan a halt duiyan animman ahall allayy		
Separate 1/3 HP motor dedicated to power a belt driven spinner shall allow		
for independent spinner speed control	Ш	
Gear Box		
Gearbox shall be 20:1 reduction and driven by #40 heavy-duty drive chain		
with a 55-tooth drive sprocket		
Chute Assembly  Dual wall nally about assembly shall be a two (2) nasition adjustable design to		
Dual wall poly chute assembly shall be a two (2) position adjustable design to		
accommodate dump body applications	Ш	
Assembly shall include a 1/3 HP motor dedicated to power a belt driven spinner	П	
i issumot, shan metade a 1/5 III motor dedicated to power a seri arren spinner		
Assembly is designed for one piece, no tools, removal for quick detach and		
Storage		
		_
Spinner disk shall be polyurethane, 15.5" in diameter, with four (4) flutes		

## <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL DUMP BODY, AS SPECIFIED, OR EQUAL</u> (CONT'D)

	<u>COMPLIANCE</u>	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1V. <u>Poly Electric Spreader Dimensions</u> (Cont'd) Chute Assembly (Cont'd)		
Spread Width shall be approximately 2' to 40'		
Shall include a wide fixed stainless deflector to protect truck bumper and under parts from the material being spread		
An alternate license plate location shall be molded into the poly chute housing		
Feed Gate Shall have a stainless steel lever/handle, spring loaded, with positive detent calibration, for accurate adjustment		
Cab Control and Wiring System Shall be fused to protect wiring, and have a blast feature for spot spreading and include self-diagnostic troubleshooting flash codes via LED's on control panel as well as audible indicators		
Control shall have dual controls to independently control the conveyor and spinner speeds		
Harnesses Shall have multiplexed electrical system with no high current power cables routed into vehicle cab		
Shall have two-piece harness with molded style connectors and covers routed to disconnect at the rear of the truck		
CHMSL (Center High Mounted Stop Light) is provided as standard, and an accessory wire for optional work light shall also be included as standard		
Standard Features Shall include heavy-duty top screen constructed from 1/4" diameter rod		
Tent style top screens shall be angled at 15°		
Hopper body shall have four (4) molded-in-poly tie-down loops		
1W. Whelen Light Bar LED Liberty II Solo IX 48" All modules filled with amber LED		
Rear traffic advisor with flashing capabilities		
Alley lights and takedowns shall be white Twelve (12) scan lock flash patterns Controller		

## <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL DUMP BODY, AS SPECIFIED, OR EQUAL</u> (CONT'D)

. ` '	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
1X. Road Department Paint Color Scheme		
(Note: <b>Not</b> all Vehicles will be painted this way)	_	_
School Bus Yellow from the bottom of the windows down		
Academy Blue #5240 from the bottom of the windows up to and including cab roof and back		
On hood from bottom of windshield to a point on the hood to make a		
"V" and match the road department fleet		
Shall be base coat clear coat		
1Y. Special Paint Colors Not On the Standard Color Chart		
12. Diagnostic Tools / Test Equipment  1. Successful bidder shall be required to supply between one (1) and three (3) complete sets of OEM testing/diagnostic/programming equipment (i.e. laptop, software, cabling, and adapters) and special tools required to perform the full range of diagnostic and maintenance actions necessary to maintain vehicle operability. This equipment will cover the vehicle chassis, engine, transmission, brakes, hydraulics, and all additional equipment (if applicable)		
2. All laptop computers will be of the newest available technology and have sufficient storage and memory to operate all required software		
3. Provide a list of all test/diagnostic/programming equipment and special tools being supplied at the time of bid		
4. All software installations and activations will be completed by the successful bidder at no cost to the County		
5. All software updates and renewal will be provided at no cost to the County for a period of five (5) years from the acceptance of the equipment		
6. All technical issues relating to test/diagnostic/programming equipment and special tools shall be resolved by the successful bidder at no cost to the County for a period of five (5) years from the acceptance of the equipment		
7. Training shall be provided on all items in this section at a specified County Location		

#### <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL DUMP BODY, AS SPECIFIED, OR EQUAL</u> (CONT'D)

<b>COMPL</b>	<b>IANCE</b>
YES	NO

#### **OPTIONS (Cont'd)**

#### 1AA. Two-Way Radio Power and Wiring Requirements for New Vehicles

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps
- #12 AWG BLACK wire connected to chassis ground
- #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps

Wires shall be encased in plastic wire loom and routed from their source into the cab	
of the vehicle and secured in the vicinity of the operator. Wiring harness shall be clearly	
labeled "TWO-WAY RADIO". Wires shall be unterminated. 12VDC sources shall be	
protected from making contact with grounded metal surfaces	

#### 1BB. Installation of County Supplied Two Way Radio and Accessories

Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
- #12 AWG BLACK wire connected to chassis ground.
- #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle. The wiring harness shall be clearly labeled "TWO-WAY RADIO". The 12VDC sources shall be protected from making contact with grounded metal surfaces.

#### 1CC. Technical Support

Technical Support is to be provided by factory authorized technical representatives and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting

The support provided shall be at the journeyman/equipment technician leve
and should address limited theory, fault diagnosis and repair pertaining
specifically to the equipment supplied under this specification

Technical support may be requested in the following areas:

- 1. Engine (cooling, fuel, ignition, lubrication systems) 1 day at each location.
- 2. Transmission 1 day at each location
- 3. Electrical -1 day at each location
- 4. Brakes -1 day at each location
- 5. Hydraulic system (dump body, spreader, snow plow) 1 day at each location
- 6. Upfitter (dump body, sweeper, etc.) 1 day at each location

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#### <u>ITEM #1 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH STEEL</u> DUMP BODY, AS SPECIFIED, OR EQUAL (CONT'D)

DOMI BODI, AS STEER LED, ON EQUIE (COM D)	COMPI	<b>COMPLIANCE</b>	
	YES	NO	
OPTIONS (Cont'd)			
1CC. <u>Technical Support</u> (Cont'd)			
Technical representative(s) shall be made available for a total of 180 training /support hours (anticipated to be scheduled in six (6) hour blocks). Shorter training days shall be allowed only with consent of Vehicle Services. Total training hours shall be provided and no additional compensation will be considered. Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder			
Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:			
• Toms River, 152 Chestnut Street, Toms River, N.J. 08753 (Two (2) sessions will be provided at this location. One beginning at 7 am and another beginning at 1:30 pm)			
• Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050			
Successful bidder shall provide Technical Support sessions for other Departments which will be held at an Ocean County location specified by the requesting			
Department			
Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only			
Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12)			
months from the date of placing the last unit in service	Ш		

		PLIANCE	
CHASSIS SPECIFICATIONS	<u>YES</u>	<u>NO</u>	
Current Model Year, or newer Ford F550 Regular Cab with 9 Foot Utility Body	П		
Dual Rear Wheels			
Four Wheel Drive			
60" Cab to Axle (CA)			
7.3L V8 gasoline engine			
40 gallon fuel tank			
TorqShift transmission with PTO option			
19,000 lb. GVWR			
Cab shall be military grade aluminum alloy for longevity to the County	Ш	Ш	
in lieu of carbon steel	П		
Frame shall be fully boxed under cab and "C" channel behind cab for easy	Ш		
mounting of body	П		
Oil life monitor, engine hour and engine idle hour meters			
Air Conditioning	П		
Airbags, frontal driver & passenger, side impact and side air curtains			
TowCommand integrated trailer brake controller, manual telescoping trailer	Ш		
tow mirrors			
7 wire trailer wiring harness (no plug)			
AM/FM radio; SYNC Enhanced voice recognition communication			
and entertainment, 911 Assist, AppLink 4-2" LCD Center Screen, One	ш		
(1) Smart charging USB Port SYNC			
Power windows, locks, mirrors, and heated mirrors		$\Box$	
Center High Mount Stop Lamp			
240 amp HD alternator, 12V 750 CCA battery		$\Box$	
Tilt and telescoping steering wheel			
4.88 ratio limited slip axle			
4 wheel power ABS brakes, front and rear disc, power steering, front and	ш		
rear stabilizer bars			
Quad-beam jewel-effect halogen headlamps, five (5) roof marker lights			
LT225/70R19.5G BSW Traction tires – six (6)	П	П	
One (1) full sized spare tire mounted to wheel and one (1) jack	П		
Chrome front bumper, front tow hooks	П		
Power Sliding Rear glass with defrost – sc/cc only	П		
Remote Start	П		
Halogen Fog Lamps			
40/20/40 split vinyl bench seat with center arm rest			
Auxiliary power point, six (6) upfitter switches located overhead center			
Tachometer, speedometer, oil pressure, transmission temp, engine temp,			
and fuel gauge			
Interval windshield wipers			
Driver & passenger grab handles			

		COMPLIANCE	
CHASSIS SPECIFICATIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
Standard XL Rear view camera and prep kit			
3-year/36,000 mile bumper-to-bumper warranty on OE components			
5-year/60,000 mile powertrain warranty			
Shift on the fly			
Cab steps, molded black (running boards)			
Snow plow prep package			
Single color to be selected from standard color chart at time of order Undercoating – entire truck chassis, underside of cab and underside of added body (dump, utility, platform) shall be coated with			
Tectyl 2423 Haps Free Black, or Z Guard Product, a low VOC, High Solids, Emulsion Corrosion preventing coating			
UTILITY BODY SPECIFICATIONS			
<b>Body Shell</b> Shall be constructed of 14 gauge two-sided A40 Galvanneal steel	П		
Shan be constructed of 1.1 gauge two stated 11.10 Garvannear steel			
The compartment tops and backs shall be a one-piece seamless design			
All door, door openings, drip rails, and other exposed steel edges shall be			
hemmed for strength, safety, and resistance to corrosion	Ш	Ш	
Floor			
The floor plate shall be constructed of a minimum of 12 gauge treadplate with a 1 3/8" return flange on each side			
The side compartment back panel should overlap and interlock with the			
floor flange, providing support for the weight of the side compartment.			
Understructure			
Cross sills shall be constructed from 11 gauge steel with 50,000 PSI minimum yield strength.			
Tailgate			
Shall be constructed of 14 gauge two-sided A40 Galvanneal steel.			
The tailgate shall be a minimum of 12" high and be a slammable style.			
In the open position, the tailgate shall be level with the cargo floor.			
The tailgate shall not have any cables, chains, or bars to support it in the open position so it can be used as a work surface for objects wider than the tailgate.			

(	<b>COMPL</b>	<b>IANCE</b>
UTILITY BODY SPECIFICATIONS (Cont'd)	<u>YES</u>	<u>NO</u>
Doors		
Shall be constructed of 20 gauge two-sided A40 Galvanneal steel.		
Shall be double paneled with Expanded Foam Block reinforcements.		
Hinges Corrosion resistant all stainless steel continuous hinges shall be installed to provide full length support for the doors and pry-proof security with a built-in weather shield.		
They shall be spot welded to the door frames and must be supported with a six year warranty, no exceptions.		
Rotary Latches Nylon Housing Zinc Die Cast Chrome Finish, corrosion resistant rotary latches shall be secured to the door panels by three threaded studs attached to the back of the latch.		
The latch must also have an internal cover to protect it from the contents of the compartment.		
Rotary latches shall be slam-latchable.		
The latching cam shall be elongated to allow the latch to move vertically relative to the lockstrike to prevent torsional damage.		
A microcellular urethane foam gasket shall be installed between the latch flange and the outer door skin to prevent moisture from entering the compartment behind the latch.		
<b>Door Strikers</b> Adjustable strikers shall be affixed to the door frames with screws (welded-on door strikers are not acceptable).		
<b>Door Seals</b> Automotive "bulb type" neoprene door seals shall be installed by the manufacturer of the body on all door frames (aftermarket not acceptable).		
Door Retainers  Double springs over center door retainers shall be installed on all vertical doors.		
Door retainers must hold doors in positive open or closed position (other types of retainers, like cables or chains, are not acceptable on vertical doors).		

(CONT D)		<b>COMPLIANCE</b>	
UTILITY BODY SPECIFICATIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
Door Retainers (Cont'd)			
Horizontal doors shall be secured in an open position parallel to the ground by			
heavy duty chain retainers.			
The chain retainers must be easily removable so that the door can be opened to			
a full 180° to be able to access the compartment in tight areas.			
Shelving			
Shelves shall be constructed of 18 gauge bright spangled galvanized steel.			
All shelves shall have hemmed dividers on 4" centers:			
• 2 shelves 1st verticals			
<ul> <li>1 shelf horizontal curbside</li> </ul>			
• 2 shelves rear verticals			
Shelves must have a minimum capacity rating of 250 lbs., no exceptions.			
Interior Paint			
Shall be a mid-gloss, mar resistant, light gray finish.			
Undercoating			
The body shall be completely undercoated by the body manufacturer using a	_	_	
water based acrylic.			
Exterior Prime Paint			
The body shall be completely immersed in electrodeposition gray epoxy prime			
paint featuring a zinc phosphate precoat and seal for additional corrosion protection.			
Prime paint shall be oven cured to provide a hard, durable finish.			
Final finish color shall match cab color, base coat clear coat.			
Installation			
The manufacturer of the body shall supply a recommended installation			
process along with detailed installation instructions that conform to all			
applicable FMVSS standards.			
Rear body to chassis mounting brackets must incorporate bumper support as			
well as provide FMVSS 301 protection. Furthermore, the manufacturer of the body shall supply an owner manual describing the proper care and maintenance			
of the body to the County.			
J J	_		

	COMPLIAN YES	NO NO
UTILITY BODY SPECIFICATIONS (Cont'd)	120	1,0
<ul> <li>Warranty</li> <li>The following items shall be covered by a 6-year limited warranty, no exceptions:</li> <li>Continuous Door Hinges (Guaranteed not to fail to operate or come off)</li> <li>Latches and Lock Cylinders (Unconditional guarantee against failure)</li> <li>Shelves (Guaranteed not to fail in bending under a maximum 250 lb. rated load)</li> <li>Body shall have a no rust-through guarantee for six (6) years</li> </ul>		
Lighting Lighting shall meet all FMVSS standards.		
The wiring harness shall be encased in a plastic loom and all wires shall be colored for ease of troubleshooting.		
The wire harness must have connectors that make it compatible to the specified chassis without splicing.		
The stop/tail/turn/reverse built into the lights with amber strobes		
The stop/tail/turn and backup lights, with strobes built into lights, shall be installed on the rear of the body		
All Clearance, Marker, and RID lighting shall be LED type lighting.		
Incandescent Lighting in any of these areas is NOT ACCEPTABLE		
Compartment lighting must be LED. with one (1) horizontal and one (1) vertical light in each compartment fit to size		
All interior wiring must be retained by a mechanical fastening system (adhesive backs are not acceptable).		
Light guards shall be installed by the body manufacturer to provide protection for recessed stop/tail/turn and back up lights.		
The wiring harness must be protected too.		
Miscellaneous Sleeve Adapter HC3Z-19H282-A		

	<b>COMPL</b>	<u>IANCE</u>
HTH ITY DODY CDECIFIC ATIONS (Co., 424)	<b>YES</b>	<u>NO</u>
UTILITY BODY SPECIFICATIONS (Cont'd) Miscellaneous		
Recessed Galva Grip Bumper:		
Class V Receiver Hitch		
<ul> <li>Pollak 7 pole RV style harness twist and lock plug</li> </ul>		
(Harness 11-998, Plug 11-916P)		
Back up alarm 102 Db		
• 3-ball receiver tube 1 7/8", 2", 2 5/16" locking hitch pin		
• 6 ton receiver mount Pintle & 2" ball combination hitch Master Lock		
with Key coded locks to match ignition key	Ш	Ш
Pre-build meeting at vendor's facility to see how work will be completed.		
Whelen Amber LED lights:		
Body upfitter must provide installation of lights so		
they work in conjunction with the equipment on the truck.		
Four (4) Micron Series Super LED in grille		
• Two (2) on body sides, one (1) each side		
• Four (4) rear of body - micron series Safety Back Rack		
BASF DTE Liner AXALTA Coating Cargo Area and top of compartments		
Atomic LED Amber Lighting		
DOT safety kit, first aid kit, 10 lb. fire extinguisher with bracket and safety triangles		
Conspicuity enhancement:		
• 2" red and white diamond grade reflective striping on face of bumper		
• 6" red and yellow inverted V on rear of body compartment face		
OPTIONS		
2A. <u>Upgrade chassis to Super Cab chassis, retaining 60" Cab to Axle</u>		
2B. Upgrade chassis to Crew Cab chassis, retaining 60" Cab to Axle		
2C. Upgrade to Regular Cab chassis with 84" Cab to Axle		
2D. <u>Upgrade to Super Cab chassis with 84" Cab to Axle</u>		
2E. <u>Upgrade to Crew Cab chassis with 84" Cab to Axle</u>		

	<b>COMPLIANCE</b>	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2F. 9' Aluminum Utility Body Upgrade Body Shell Shall be constructed of 0.09" Aluminum.		
The compartment tops and backs shall half-box structure with continuously formed corners		
Compartment bottom over the wheel to be constructed of 0.125" Aluminum		
Body Shell shall be supported by structural 6061 T6 Aluminum extrusions for durability		
All door, door openings, drip rails, and other exposed steel edges shall be hemmed for strength, safety, and resistance to corrosion		
Floor The floor plate shall be constructed of interlocking, extruded 6061		
T6 Aluminum Planks with locking aluminum end rails and aluminum side rails with a 1 3/8" return flange on each side  The side compartment back panel should overlap and interlock with the floor		
flange, providing support for the weight of the side compartment		
Understructure Support shall be constructed entirely of extruded 6061 T6 Aluminum Alloy		
Tailgate Shall be constructed of 0.09" Aluminum multi-panel		
The tailgate shall be a minimum of 12" high and be a slammable style		
In the open position, the tailgate shall be level with the cargo floor		
The tailgate shall not have any cables, chains, or bars to support it in the open position so it can be used as a work surface for objects wider than the tailgate		
<b>Doors</b> Shall be box structure, doubled paneled and constructed of 0.08" Aluminum with outer panel corners formed continuously		

(	<b>COMPLIANCE</b>	
ODTIONS (Contrd)	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd) 2F. 9' Aluminum Utility Body Upgrade (Cont'd)		
Hinges Corrosion resistant, all stainless steel, continuous hinges shall be installed to provide full length support for the doors, and pry-proof security with built-in weather shield	П	П
	ш	Ш
Shall be applied with structural adhesive and rivets to the door frames and shall be supported with a ten (10) year warranty		
Rotary Latches Injection molded glass and mineral unfused UV Resistant Nylon Housing, Zinc Die Cast, Chrome Finished latch		
Corrosion resistant rotary latches shall be secured to the door panels by four (4) threaded studs attached to the back of each latch		
The latch must also have an internal cover to protect it from the contents of the compartment		
Rotary latches shall be slam-latchable		
The latching cam shall be elongated to allow the latch to move vertically, relative to the lock strikes to prevent torsional damage		
A microcellular urethane foam gasket shall be installed between the latch flange and the outer door skin to prevent moisture from entering the compartment behind the latch		
Lock cylinders are to be flush mounted for additional security		
Door Strikers Adjustable strikers shall be affixed to the door frames with screws (welded-on door strikers are NOT ACCEPTABLE)		
Door Seals Automotive "bulb type" neoprene door seals shall be installed by the manufacturer of the body on all door frames (aftermarket NOT ACCEPTABLE)		
<b>Door Retainers</b> Nitrogen gas strut door retainers shall be install on all vertical doors		

	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2F. <u>9' Aluminum Utility Body Upgrade</u> (Cont'd)		
Door Retainers (Cont'd) Door retainers shall hold doors in positive open or closed position (other types of retainers, like cables or chains, are NOT ACCEPTABLE on vertical doors)		
Horizontal doors shall be secured in an open position parallel to the ground by heavy duty chain retainers		
Chain retainers shall be removable so that the door can be opened to at least 150° to be able to access the compartment in tight areas		
Shelving Shelves shall be constructed of 0.06" Aluminum		
Two (2) adjustable divider shelves and dividers, street and curb side front vertical compartment		
One (1) adjustable divider shelf and dividers, street and curb side full height rear vertical compartment		
One (1) adjustable divider shelf and dividers, curb side horizontal compartment		
Automotive style, rotary latches and gas spring door retainers on all vertical doors		
All shelves shall have molded, infinitely adjustable sliding dividers		
Shelves must have a minimum capacity rating of 250 lbs., <b>no exceptions</b>		
Exterior Prime Paint Epoxy prime paint with a minimum of 1.2 mm coat		
Prime paint shall be oven cured to provide a hard, durable finish		
Final finish color shall match cab color, base coat clear coat		
Interior Paint Shall be a mid-gloss, mar resistant, light gray finish		
Undercoating The body shall be completely undercoated by the body manufacturer using a water based acrylic		

(000.1 -)	<b>COMPLIA</b>	NCE
	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd) 2F. 9' Aluminum Utility Body Upgrade (Cont'd)		
Installation		
The manufacturer of the body shall supply a recommended installation process along with detailed installation instructions that conform to all		
applicable Federal Motor Vehicle Safety Standards		
Rear body-to-chassis mounting brackets shall incorporate bumper support as well as provide FMVSS 301 protection		
Manufacturer of the body shall supply an owner's manual describing the proper care and maintenance of the body to the County		
<ul> <li>Warranty</li> <li>The following items shall be covered by a ten (10) year limited warranty:</li> <li>Continuous Door Hinges (Guaranteed not to fail to operate or come off)</li> <li>Latches and Lock Cylinders (Unconditional guarantee against failure)</li> <li>Shelves (Guaranteed not to fail in bending under a maximum 250 lb. rated load)</li> <li>Body shall have a No-Rust-Through guarantee for ten (10) years</li> </ul>		
Body shall have a No-Rust-Through guarantee for ten (10) years	ш	
Lighting Lighting shall meet all FMVSS standards		
The wiring harness shall be encased in a plastic loom and all wires shall be colored for ease of troubleshooting		
The wiring harness shall have connectors that make it compatible to the specified chassis without splicing		
Rear lighting system to feature surface mount stop/tail/turn backup lights, with LED strobe. Having eight (8) selectable patterns and built in reflectivity for additional safety		
All clearance, marker, and RID. Lighting shall be LED type (incandescent lighting in any of these areas is <b>NOT ACCEPTABLE</b> )		
LED Compartment lighting each compartment to have one (1) full length vertical and horizontal light to illuminate full compartment.		
All interior wiring must be retained by a mechanical fastening system (adhesive backs are <b>NOT ACCEPTABLE</b> )		
Light guards shall be installed by the body manufacturer to provide protection for recessed stop/tail/turn and back up lights		
Protection for the wiring harness shall be installed Safety Back Rack		

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd)		
2F. <u>9' Aluminum Utility Body Upgrade</u> (Cont'd) Miscellaneous		
Recessed Galva Grip Bumper:		
Class V Receiver Hitch		
<ul> <li>Pollak 7 pole RV style harness twist and lock plug</li> </ul>		
• (Harness Part #11-998, or equal/7-Way Plug Part #11-916P, or equal)		
• Back up alarm 102 Db		
<ul> <li>3-ball receiver tube 1 7/8", 2", 2 5/16" lock in style</li> <li>6 ton receiver mount Pintle &amp; 2" ball combination hitch</li> </ul>		
Master Lock with Key Coded Locks to match ignition key		Ш
Pre-build meeting at vendor's facility to see how work will be completed		
DOT safety kit, first aid kit, 10 lb. fire extinguisher with bracket and safety triangles		
Conspicuity enhancement:		
• 2" red and white diamond grade reflective striping on face of bumper		
6" red and yellow inverted V on rear of body compartment face		
2G. 11 Foot Body Upgrade  11' Body upgrade – requires a chassis with an 84" CA measurement  132" L x 94" W Compartment Configuration:  • First Vertical 35 ¼" L x 40" H  • Second Vertical 21" L x 40" H		
• Horizontal 44 ¾" L x 18 ½" H		
<ul> <li>Rear Vertical 27 ½" L x 40" H – reinforced compartment and clips for shelves for heavy duty application</li> </ul>		
<ul> <li>Shelving Configuration:</li> <li>Two (2) shelves first Vertical each side</li> <li>Two (2) shelves second Vertical each side</li> <li>One (1) shelf horizontal curbside</li> </ul>		
• Two (2) shelves Rear vertical each side		
<b>2H.</b> <u>Maxon Liftgate</u> C2-54-1642-TP38 55" x 38" +4	П	П
	_	_
Aluminum 2 piece extruded plat form 1600 pound capacity		
For use with utility bodies with openings of 54-61"		
21. Flip Top Compartment both Street and Curbside for 9 Foot Utility Body		

	COMPLI YES	
OPTIONS (Cont'd)	<u>1 L S</u>	<u>NO</u>
2J. Flip Top Compartment both Street and Curbside for 11 Foot Utility Body		
2K. Raised Front Curbside Compartment for Both 9 Foot and 11 Foot Utility Bodic not included):	es (bottle ga	as retainer
<ul> <li>Front Vertical Compartment 60" H Raised with Masterlock</li> <li>Rivet-less rotary latches</li> <li>Gas spring door retainers</li> <li>Code-able Padlock to match Ignition Key</li> </ul>		
<ul> <li>2L. Bottle Retainer Compartment</li> <li>Bottle Retainer Compartment with Masterlock:</li> <li>60" H x 35 ½" W x 20" D</li> <li>Two (2) hooks for cords</li> <li>Bottle holder</li> </ul>		
<ul> <li>Victor Journeyman 450 Heavy Duty Outfit – 540/300 SR Regulators - Torch Set</li> <li>Code-able Padlock to match Ignition Key</li> </ul>		
<ul> <li>2M. High Compartment Body, 9 Foot Utility Body</li> <li>Compartment Configuration 9' Utility:</li> <li>First Vertical 35 ½" L x 60" H</li> <li>Horizontal 44 ¾" L x 38 ½" H – will have barn doors with 3 point latches</li> <li>Rear Vertical 27 ½" L x 60" H – reinforced compartment and clips for shelves for heavy duty application</li> </ul>		
<ul> <li>Shelving Configuration:</li> <li>Four (4) shelves first Vertical Street side</li> <li>Bottle Retainer compartment first vertical curbside – Two (2) hooks for cords, bottle holder, Journeyman 450 Heavy Duty Outfit torch set</li> <li>One (1) shelf horizontal curbside</li> <li>Three (3) shelves Rear vertical each side</li> </ul>		
Bottle Retainer Compartment with the high side utility:  • 60" H x 35 ½" W x 20" D  • Two (2) hooks for cords  • Bottle holder  • Victor Journeyman 450 Heavy Duty Outfit – 540/300 SR Regulators- Torch Set  • This option selected with the high utility will eliminate the shelves		П
F reer servers	_	_

	COMPLIANCE	
OPTIONS (C. 41)	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd) 2N. High Comportment Body, 11 Fact Utility Body		
2N. <u>High Compartment Body</u> , 11 Foot Utility Body Compartment Configuration:		
• First Vertical 35 ¼" L x 60" H		
• Second Vertical 21" L x 60" H		
<ul> <li>Horizontal 44 ¾" L x 38 ½" H – will have barn doors with 3 point latches</li> </ul>		
• Rear Vertical 27 ½" L x 60" H – reinforced compartment and clips for		
shelves for heavy duty application		
Shelving Configuration:		
<ul> <li>Four (4) shelves first Vertical Street side</li> </ul>		
• Bottle Retainer Compartment first vertical curbside – Two (2) hooks		
for cords, bottle holder, Victor Journeyman 450 Heavy Duty Outfit torch set		
• Three (3) shelves second Vertical each side		
• One (1) shelf horizontal curbside	_	
• Three (3) shelves Rear vertical each side		
Bottle Retainer Compartment with the high side utility:		
• 60" H x 35 ¼" W x 20" D		
• Two (2) hooks for cords		
Bottle holder		
• Victor Journeyman 450 Heavy Duty Outfit – 540/300 SR Regulators-Torch Set		
• This option selected with the high utility will eliminate the shelves		
2O. Subfloor with Full Height Tailgate		
6" High full length sub floor with full height tailgate		
2P. <u>Transverse Compartment</u>		
First Vertical Full Transverse Compartment:		
• Three (3) draw pull out both street and curbside		
If ordered with bottle cabinet, transverse will be street side only		
• When ordered with C-Tech Drawer Unit, transverse shall	_	_
be curb side pull out only		
2Q. C-Tech Drawer Unit for Standard Height Body		
Drawer Unit to be installed in Street side first vertical:		
<ul> <li>Drawers shall be rated for 250 lbs</li> </ul>		
• 28" x 17.5"		
• .08", 5052 aluminum alloy construction		
• 40" Compartment Height Configuration		
• One (1) 7" Deep Drawer		
• Two (2) 5" Deep Drawers		
• Three (3) 3" Deep Drawers		

	<u>COMPL</u>	<b>IANCE</b>
	<u>YES</u>	<u>NO</u>
<u>OPTIONS</u> (Cont'd) 2R. <u>C-Tech Drawer Unit for 60" High Utility Body</u>		
Drawer Unit to be installed in Street side first vertical:		
Drawers shall be rated for 250 lbs		
• 28" x 17.5"		
• .08", 5052 aluminum alloy construction		
40" Compartment Height Configuration		
• Two (2) 7" Deep Drawers		
• Three (3) 5" Deep Drawers		
• Four (4) 3" Deep Drawers		
2S. Venco Venturo 4,000 LB. Electric Crane (NOTE: Not Available with Aluminum Body)  12VDC Electric Crane – Venco Venturo Model ET16KX  • Range 16,000 ft./lb. – 4,000 lbs. @ 4.0' – 900 lbs. @ 16'		
Boom Extension – Power 8'-12' – Manual 12'-16'  Continuous properties 8 Properties 12'-16'  Continuous properti		
• Continuous power rotation & Power boom elevation		
• 25' plug in Remote Control Pendant		
Anti-Two Blocking		
<ul> <li>Auxiliary Vented Battery:</li> <li>Includes fuses</li> <li>Smart Isolator &amp; On/Off Switch</li> <li>Wireless FM Remote Control with On-Board Diagnostics System and</li> </ul>		
Receiver		
Adjustable Boom Rest		
<ul><li>Knapheide Corner Mount Crane Kit</li><li>Right rear LEAF Spring upgrade for Crane Application</li></ul>		
Venturo Outriggers:		
Electric Hydraulic Outriggers		
<ul> <li>2T. <u>Custom Rear Work Bumper</u></li> <li>24" deep with recessed vise mount housing</li> <li>Step with grab handle</li> </ul>		
Includes Outrigger housing tubes  PAGE C.  Includes Outrigger housing tubes		
BASF Spray liner on top	Ш	

	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2U. Ladder Rack		
(NOTE: This option shall be used with non-flip-top utility bodies)		
<ul> <li>System One Ladder Rack:</li> <li>Constructed of high-strength aluminum alloy with stainless steel hardware</li> <li>A 78" utility track provides a rigid mounting surface for the ladder rack</li> <li>The utility track attaches to the top surface of the utility body using concealed bolts and also serves as a structural anchor rail for tie-downs</li> <li>Set of four (4) work winches with straps and handles, which plug into the racks in just minutes</li> </ul>		
<ul> <li>Winches are constructed from aluminum alloy and stainless steel and have PVC bearings for rust-free durability</li> </ul>		
2V. E-Track Down Each Side of Body – 2" from Top of Compartments		
2W. Four (4) 2' X 12" Ratchet Straps		
2X. BASF Spray Liner on Floor of Compartments		
<ul> <li>2Y. Whelen LED Liberty II Solo IX 48" Light Bar</li> <li>Light Bar LED Liberty II Solo IX 48", all modules filled with amber LED</li> <li>Rear traffic advisor with flashing capabilities</li> <li>Alley lights and takedowns are to be white</li> <li>Twelve (12) scan lock flash patterns</li> <li>Controller</li> <li>Brackets for mounting on Safety Back Rack</li> </ul>		
2Z. Light Color Option for Liberty II Solo IX 48" Light Bar		
<ul> <li>Light Color Option:</li> <li>Red and Blue – single color modules in lieu of amber for Sheriff's Department, keeping the amber rear arrow stick; module placement shall be provided at time of order</li> </ul>		
<b>2AA.</b> Emergency Lighting Split Red Blue Body Lights 3 ½" Super LED clear lens with 3 ½" Super LED Surface Mount clear lens with red and blue lights shall be installed		
<ul> <li>Whelen LED Lights: Emergency Light Package</li> <li>Body Upfitter must provide installation of lights so they work in conjunction with the equipment on the truck:</li> <li>Four (4) Micron Series Super LED in grill – split color</li> <li>Two (2) on body sides, One (1) each side split color</li> <li>Four (4) rear of body to work with chosen equipment – split color</li> </ul>		

				COMPLIA YES	
<b>OPTIONS</b>	(Cont'd)			<u>1 E S</u>	<u>NO</u>
	olazer 302 Air I	<u>Pak</u>			
• Mod	lel 907549003, c	or equal			
• Batte	ery Charge/Cran	k Assist with 2	5' Battery charge/jump cable Part #300422		
• Inde	pendent Weld aı	nd Generator			
	strial Rotary Sci	-	essor		
	Cooler Separator	r Part			
	Filter Part	_			
	ccant Air Dryer				
	eless Remote Ha	and Control Part	t		
• Prote	ective Cover				Ш
2CC. Winc	h				
	d issue must be 2	2021, or newer			
12,000 lbs.					
	es Wound, 12V				
	ontrols: Contrac				
	ntrol: Remote Sv				
	-stage planetary				Ш
Gear ration:		,• •			
,	spooling): Rota matic mechanic				
	eter/Length: 3.1				
Rope: 3/8"		3 /9.0			
•					
	rformance Spec		- 44		
	Line Speed -	Motor	Pull by		
Lbs.	Ft.	Current	Layer/Lbs.		
0 2000	28.1 14.2	66 amps 141 amps	1/12000 2/9894		
4000	9.3	209 amps	3/8117		
6000	7.8	272 amps	4/7324		
8000	6.4	335 amps	,321		
10000	4.3	401 amps			
12000	3.3	469 amps			
Winch Dim					
Integrated c	onfiguration: 24	.25" L x 7.15"	D x 10.52" H		
Low-Profile	configuration: 2	24.25" L x 7.15	"D x 7.84" H		
<b>Mounting I</b> 10" x 4.5"	Bolt Pattern:			П	
20 /2 110				_	

		COMPLIANCE	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
2CC. Winch (Cont'd) Winch Mount Grille Guard/ Head Lamp Guard Kit, As Specified or Equal			
Weight: 148 lbs.			
Dimensions: 89" x 37" x 38"			
16,500 lb. straight line pull			
14 gauge 1.5" steel tube			
Center Crossbars: 1.5" diameter tubing			
Removable headlight area cross bars			
Double hood bar design			
Powder coated black			
Warranty: Material and Workmanship: Lifetime of winch			
Electric Components: 7 years			
Winch Mount Grille Guard: 3-year warranty			
Fairlead: Roller			
Recommended battery: 650 CCA minimum for winching			
Battery Leads: 2 gauge, 72"			
<b>2DD.</b> <u>Air Compressor</u> , 150 CFM  VMAC VR150 Underhood Rotary Screw Compressor			
150 CFM, 175 PSI			
3 gallon receiver tank Control panel			
Throttle control			
Filter/Regulator/Lubricator			
Relief/Shut-Off valves with all required fittings			

	<b>COMPL</b>	<b>IANCE</b>
OPTIONS (Cont?d)	<u>YES</u>	<u>NO</u>
OPTIONS (Cont'd) 2DD. Air Compressor, 150 CFM		
Hose Reel: 50' of ½" I.D. air line		
2EE. <u>Pioneer Flood Light Head – Model PFP2P1, or Equal</u> General Specifications:		
168 Watt +12VDC light head shall incorporate a Super-LED dual flood light installed in die-cast white powder coated aluminum housing.		
Configuration shall consist of 60 white Super-LEDs with a clear optic collimator/metallized reflector assembly and a clear non-optic polycarbonate lens.		
The flood light shall be installed with a pole/pedestal adaptor with a 1 1/8" adjustable sleeve, junction box, a toggle switch with weatherproof boot and a large anodized aluminum alloy ergonomic knob at the knuckle.		
Shall be installed with a black fiberglass enforced polycarbonate handle.		
Flood light shall have 16,000 usable lumens.		
The lens/reflector assembly shall utilize a liquid injected molded silicone gasket to be resistant to water, moisture, dust and other environmental conditions.		
The hard coated lens shall provide extended life/luster protection against UV and chemical stresses.		
Shall be vibration resistant.		
PC boards shall be conformal coated for protection		
Two breathable membrane patches shall be installed to the bottom of the housing to maintain a consistent internal pressure.		
Shall have extended LED operation with low current consumption and low operating temperature.		
Furnished with a 6" non-terminated pigtail in the junction box		
Shall have the ability to flash a secondary warning light in the "Clearing Right of Way" mode when installed with an external flasher.		
Shall be SAE 1113-42 compliant and Class 5 testing for EMI		
Voltage: +12v DC		

CTIEFT BODI, AS SIECTED, ON EQUAL (CONT B)	COMPLIAD YES	NCE NO
OPTIONS (Cont'd) 2EE. Pioneer Flood Light Head – Model PFP2P1, or Equal (Cont'd)	<u>TES</u>	110
General Specifications: (Cont'd) Size: H=4.125", W=14", D=2.5"		
Amp Draw: Spot light=13 amps		
Lens Color: Clear		
Warranty 5-year warranty on light and electronic circuit boards		
<b>2FF.</b> Cast Iron Mechanic's Vise on Removable Plate with Receiver Type Hitch Duty Rating: Standard Duty, Features Steel Channel and Jaws, Large Anvil Work Surface, Enclosed Screw Assembly, Powder Coated		
Base Type: Swivel – Swivel Angle		
Jaw Width: 6"		
Max. Opening: 5 <sup>3</sup> / <sub>4</sub> " Throat Depth: 4 1/8"		
Pipe Jaw Included: Yes		
Pipe Capacity: 1/4" to 3 1/2" Material: Cast Iron		
Jaw face: Serrated		
Number of Lock Down Bolts: 2		
Body Casting: 30,000 PSI Number of Mounting Points: 4 Mounting Hole Diameter: ½"		
Overall Length: 17 3/4", Overall Height: 10 3/4", Overall Width: 11"		
Lifetime Warranty against Manufacturer's defects		
2GG. Husky 815-Piece Mechanic's Tool Set		
Key Features: Alloy Steel Construction SAE and Metric Sizes		
Item Weight: 178 lbs.		

	<b>COMPLIANCE</b>	
	<u>YES</u>	<u>NO</u>
<u>OPTIONS</u> (Cont'd) <u>2GG. Husky 815-Piece Mechanic's Tool Set</u> (Cont'd)		
Tool Set		
<ul> <li>Husky Mechanic Tool Set (815 pieces) Part # H815MTS Includes:</li> </ul>		
• 433 sockets		
• 230 accessories		
• 145 various wrenches (standard combination, stubby, ratcheting,		
stubby ratcheting, flex head ratcheting, reversible ratcheting and specialty)		
• 7 ratchets		
• 72-tooth quick release ratchet		
"No Questions/No Receipts" Lifetime warranty		
Impact Sockets		
Dewalt – DWMT 19242 1/2" Drive metric deep impact socket set (26 pieces)		
Dewalt – DWMT 19239 ½" Drive SAE Deep impact socket set (19 pieces)		
Limited Lifetime Warranty		
Impact Wrench		
• Milwaukee M18 Fuel 18 Volt Litium Ion Brushless, Cordless ½" impact		
wrench with friction ring kit		
• Two (2) 5.0 Ah batteries		
• 5 Year Warranty/Tool		
• 3 Year Warranty/Battery		
2HH. <u>Truck Steel Air/Hydraulic Service Jack</u>		
Material: Steel		
• Lifting Capacity: 22 Tons		
• Lifting Height Min: 8 ½"		
• Lifting Height Max: 17"		
• Power Raise: 4 5/8" • Chassis Langth: 22"		
<ul><li>Chassis Length: 22"</li><li>Operation Type: Air</li></ul>		
• Retracted Length: 8 ½"		
Handle Length" 47 3/8"		
<ul> <li>Standards: ANSI, ASME and PALD 2009</li> </ul>		
• 1-year Limited Warranty		
- · · · · · · · · · · · · · · · · · · ·		

	<u>COMPI</u> YES	<u>JANCE</u> NO
OPTIONS (Cont'd)	1 ES	110
2II. <u>1700 Peak Amp 12 Volt Jump Starter</u>		
• 1700 Peak Amps		
• 425 Cranking Amps		
PROFORMER Battery Technology		
• 46 inch heavy-duty #2 AWG cables		
<ul> <li>Voltmeter providing charge status of onboard battery</li> </ul>		
• DC outlet to power: 12 volt Item Weight: 18 lbs.		
• Product Dimensions: 16.3" x 14.1" x 5.1"		
• Voltage: 12 volts		
• 1-year Limited Warranty		
2JJ. <u>Booster Jump Set</u>		
Grey with 25' Cables		
1-year warranty: Free of defects in material and workmanship		
2KK. Road Department Paint Color Scheme Road Department Paint Colors – Dupont 4357A – School Bus Yellow from the bottom of the windows down. Academy Blue #4250 from the bottom of the windows up to and including cab roof and back, on hood from bottom of windshield to a point on the hood to make a "V" and match the Road Department fleet. (Note: Not all Vehicles will be painted this way)		
2LL. <u>Vehicle Special Order Paint Colors Not On the Standard Color Chart</u> (i.e. Gem Green)		
2MM. EnPak A30GBW All-In-One with gasoline driven power capabilities, 12V DC		
Integrated into the battery, chassis power monitors battery and automatically charges as needed		
Auto-Speed Technology adjusts engine speed to match compressed air, battery charge, and weld demands		
Auto Start/Stop turns the engine on and off based on demand, reducing fuel Consumption		

	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2MM. EnPak A30GBW (Cont'd)		
CAN Bus Connectivity Allows connection to telematics system to monitor engine date, machine loads and		
usage, also allows tracking of service intervals, schedule maintenance and improve diagnostics	П	
improve diagnostics		
23hp Kohler Gas Engine 2,400 rpm idle speed		
2,400rpm – 3,600 rpm weld speed		
Single phase, continuous power generator with 6,500		
Watts; Peak power 8,000 Watts		
Idle sound rating of 66 dB and high speed sound rating of 73 dB		
Dimensions: 28" H X 20" W X 47" D; 15.2ft2 in length		
Remote Panels	_	
Weld/battery output panel Main Control panel 120/240V outlet panel		
30 CFM Air Compressor		
Rotary-screw air compressor		Ш
<b>Generator</b> 6,500 Watt Electric Generator able to power 120V and 240V AC tools and lights	П	П
	Ш	
Battery Charge/Crank Assist Maximum of 100 amps of DC power for 12/24V battery charging		
, , ,		
Maximum of 300 amps for crank assist		Ш
Welding		
210 amp inverter based welder with multi-process ability		Ш
Accessories		
25' Battery Charge/Jump Start Cables with plug Air dryer kit		
Pressure switch kit	Ш	Ш
Air Compressor Oil Heater		

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OPTIONS (Cont'd)	<b>YES</b>	<u>NO</u>	
2MM. EnPak A30GBW (Cont'd)			
Accessories (Cont'd)			
Cable with Electrode holder	Ш	Ш	
Cable with work clamp			
2/0 Weld Cable Extension 50'			
Hose Reel with 50' of ½" I.D. Air Line			
<ul> <li>2NN. Inverter</li> <li>AIMS Pure Sine 4000 Watt Inverter, placement to be decided at time of order</li> <li>Peak Power 12,000 Watt surge rating</li> </ul>			
• 12 Volt			
Installed with two (2) auxiliary batteries			
Additional GFI outlet with weather proof protector located at end users placement			
<ul> <li>Isolation Solenoid</li> <li>When truck is running it is charging auxiliary batteries and when truck is off it is only running off auxiliary batteries</li> </ul>			
200. Go-Lights, Model 3024 Go Light Stryker Work Lights (Up to two (2) per vehicle)			
Permanently mounted on retractable poles between front of body and back of cab			
6000 maximum lumens			
5 amp draw			
9-32 VDC input			
2PP. 9' Readily Detachable Western Snow Plow System			
Blade Assembly Moldboard – 12 gauge (0.104") steel sheet formed to a 17.3" radius with a 1.76" diameter top curl			
Ribs – Eight (8), 0.25" thick, variable profile, electrically welded to sheet, torsion tube and 0.25" thick, high strength steel base channel			
Torsion Tube – 2" diameter, full width, electrically welded to all eight ribs			

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		<b>COMPLIANCE</b>	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
OPTIONS (Cont'd) 2PP. 9' Readily Detachable Western Snow Plow System (Cont'd)			
Lift Frame Shall have provision for attachment of out front hydraulics and light kit			
Lift Arm – 0.25" x 2" formed bar welded with a 7 gauge steel cover			
Two Plow Stands:  • Self-storing  • Adjustable		П	
Adjustable	Ш		
Integrated into the plow attachment mechanism.			
Connecting hook and lever with integral 0.50" lock pin			
Two piece lift frame with tubular construction			
Lower lift frame to include drive in plow alignment horns			
<b>Mount</b> Custom designed, electrically welded, structural steel mounting readily adaptable to truck frame. Attached to truck with Grade 5 fasteners			
Vehicle, with mount attached, shall meet Federal Motor Vehicle Safety Standards by compliance or by vehicle manufacturing approval			
Removable receiver brackets for additional ground clearance			
Paint Plow blade shall be made of shot blasted steel and cleaned with phosphate solutions and have baked-on red polyester powder coating			
Hydraulics Electric solenoid activated and detachable with lift			
Front mounted hydraulic unit consisting of a fixed displacement gear pump, with 1750 PSI system relief, direct tang driven by a 4 ½" 12 volt DC motor			
Pump with filter screen shall be immersed in a steel deep drawn reservoir			
Main valve manifold shall contain three (3) side mounted and covered solenoid cartridge valves			
Cushion relief valves set at 4,000 PSI and a quill adjustment screw to adjust blade drop speed			

	COMPLIAN	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2PP. <u>9' Readily Detachable Western Snow Plow System</u> (Cont'd) Hydraulics		
One (1) 1 ½" x 8" lift ram and two (2) 1 1/2" x 12" angling rams each rod		
with seal, a wiper ring and a packing nut		
Hydraulic hoses shall be 1/4" x 3/8" steel braided SAE 100R1		
Hydraulic unit shall be controlled by a soft touch, hand held in-cab control.		
Control shall be equipped with an on/off and mode buttons and indicator lights.		
Control can be dash mounted		
Control shall provide a single button movement angle right or left (hydraulically locked)		
In-cab control shall be connected to valve manifold and to the motor through		
an auxiliary 12-volt multiplexed harness. Power and control harness to have quick disconnects and covers at the grill	П	
quick disconnects and covers at the grin		Ш
Control shall allow plow to be in float when lowered		
Unit shall be a "low side" drive system, which provides positive potential continuously with a switched ground to control the solenoids		
Unit shall possess programmable security lockout feature Unit shall possess		
programmable hydraulic soft stop feature Unit shall possess programmable one touch float feature	П	
		Ш
Hydraulic fluid shall be MIL5606 equivalent standard transmission fluid (ATF) or aircraft hydraulic oil for low-temperature operation		
Cycle times: Lift, 2.0 seconds; Angle, 1.5 seconds		
Hydraulic unit shall stay with plow when plow is disconnected from truck		
Lights		
Nighthawk LED Headlamps		
Headlights		
Comprised entirely of light emitting diodes using solid optic elements for low beam and high beam lights	П	П
A reflected LED light for the side lighting using EdgeView Technology		
DRL/Park lights using white lights behind a frosted filter, turn signal utilizing		
amber lights behind the same frosted filter		Ш

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 2PP. 9' Readily Detachable Western Snow Plow System (Cont'd)		
Plow Removal		
Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be removed in one step from truck as one complete unit		
Accessories with Plow Snow deflector	П	П
Curb guard right and left		
Cab command Hand Held Control or Joystick		
2QQ. Poly Electric Spreader		
<ul> <li>Dimensions</li> <li>Outside Hopper 103" L</li> <li>Outside Hopper 63" W</li> <li>Overall Spreader 117" L</li> <li>Overall Spreader 51" H</li> <li>Capacity 2.5 yd3</li> <li>Empty Weight 734 lbs</li> </ul>		П
Poly Hopper Construction Shall be constructed of rotationally molded 1/4" thick double walled polyethylene shell		
46° sloped sides with six (6) molded side support ribs		
Molded rear "feet" for ease of removal, cleaning and storage		
Shall include standard 2-piece hinged, double-walled, overlapping domed hard plastic covers that double as spill guards		
Conveyor Drive Bed Shall be 100% constructed of 10 gauge 201 stainless steel with a 16 ¾" wide pintle chain conveyor system		
<b>Dual Motor Drive</b> One motor shall be a sealed ½ HP-12VDC capacity with an 11-tooth drive sprocket powering a #40 roller chain to gearbox which allows for independent pintle chain speed control.		
A separate 1/3 HP motor, dedicated to power a belt driven spinner, shall allow for independent spinner speed control		

(	COMPLIANCE	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2QQ. Poly Electric Spreader (Cont'd)		
Gear Box Gearbox shall be 20:1 reduction and driven by #40 heavy-duty		
drive chain with a 55-tooth drive sprocket		
Chute Assembly		
Dual wall poly chute assembly shall be a two position adjustable design		
to accommodate dump body applications		
Assembly shall include a 1/3 HP motor dedicated to power a belt driven spinner		
Chute/Spinner Assembly is designed for easy, no tools, removal in one piece for		
quick detach and storage		
Spinner disk shall be polyurethane, 15.5" in diameter, with four (4) flutes		
Width of spread shall be approximately 2' to 40'		
Shall include a wide fixed stainless deflector to protect truck bumper and		
under parts from the material being spread		
An alternate license plate location shall be molded into the poly chute housing		
Feed Gate		
Shall have a stainless steel lever/handle, spring loaded, with positive detent calibration, for accurate adjustment		
Cab Control and Wiring System	_	_
Shall be fused to protect wiring, and have a blast feature for spot spreading		
Include self-diagnostic troubleshooting flash codes via LED lights located on		
control panel as well as audible indicators		
Control shall have dual controls to independently control the conveyor		
and spinner Speeds		
Harnesses		
Shall have multiplexed electrical system with no high current power cables routed into vehicle cab	П	П
	_	_
Shall have two-piece harness with molded style connectors and covers routed to disconnect at the rear of the truck		
CHMSL (Center High Mounted Stop Light) is provided as standard		
Cinvide (Contoi ringh Mounted Stop Eight) is provided as standard		
An accessory wire for optional work light shall also be included as standard		

	` ,	COMPLI	
	ONS (Cont'd) Poly Floatrio Sayon den (Cont'd)	<u>YES</u>	<u>NO</u>
Standa	Poly Electric Spreader (Cont'd) ard Features nclude heavy-duty top screen constructed from 1/4" diameter rod		
Tent st	yle top screens shall be angled at 15°		
Hoppe	r body shall have four (4) molded-in-poly tie-down loops		
_	Pipe Vise on Removable Plate with Receiver Type Hitch ise mounted on rear step bumper		
Wilton	6 ½" Swivel Pipe Vise		
Wilton	Pipe Jaws		
	Successful bidder shall be required to supply between one (1) and three (3) complete sets of OEM testing/diagnostic/programming equipment (i.e. laptop, software, cabling, and adapters) and special tools required to perform the full rar of diagnostic and maintenance actions necessary to maintain vehicle operability. This equipment will cover the vehicle chassis, engine, transmission, brakes, hydraulics, and all additional equipment (if applicable)	_	
2.	All laptop computers will be of the newest available technology and have sufficistorage and memory to operate all required software	ent	
3.	Provide a list of all test/diagnostic/programming equipment and special tools being supplied at the time of bid		
4.	All software installations and activations will be completed by the successful bidder at no cost to the County		
5.	All software updates and renewal will be provided at no cost to the County for a period of five (5) years from the acceptance of the equipment		
6.	All technical issues relating to test/diagnostic/programming equipment and special tools shall be resolved by the successful bidder at no cost to the County for a period of five (5) years from the acceptance of the equipment		
7.	Training shall be provided on all items in this section at a specified County location		

### ITEM #2 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH 9 FOOT UTILITY BODY, AS SPECIFIED, OR EQUAL (CONT'D)

COMPLIANCE YES NO

#### **OPTIONS** (Cont'd)

#### 2TT. Two-Way Radio Power and Wiring Requirements for New Vehicles

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps
- #12 AWG BLACK wire connected to chassis ground

Brakes – 1 day at each location

• #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps

Wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle and secured in the vicinity of the operator.  Wiring harness shall be clearly labeled "TWO-WAY RADIO". Wires shall be unterminated 12VDC sources shall be protected from making contact with grounded metal surfaces		
<b>2UU.</b> Installation of County Supplied Two Way Radio and Accessories Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:	e	
<ul> <li>#12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.</li> <li>#12 AWG BLACK wire connected to chassis ground.</li> <li>#16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.</li> </ul>		
These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle.  The wiring harness shall be clearly labeled "TWO-WAY RADIO". The 12VDC sources shall be protected from making contact with grounded metal surfaces		
<b>2VV.</b> <u>Technical Support</u> Technical Support is to be provided by factory authorized technical representatives and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting		
The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification		
<ul> <li>Technical support may be requested in the following areas</li> <li>Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.</li> <li>Transmission – 1 day at each location</li> <li>Electrical – 1 day at each location</li> </ul>		

Hydraulic system (dump body, spreader, snow plow) – 1 day at each location

Upfitter (dump body, sweeper, etc.) -1 day at each location

## ITEM #2 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH 9 FOOT UTILITY BODY, AS SPECIFIED, OR EQUAL (CONT'D)

		NCE
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
2VV. Technical Support (Cont'd) Technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks)		
Shorter training days shall be allowed only with consent of Vehicle Services		
Total training hours shall be provided and no additional compensation will be considered		
Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder		
For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled		
Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper education		
Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:  • Toms River, 152 Chestnut Street, Toms River, N.J. 08753  (Two (2) sessions will be provided at this location: One beginning at 7 am and another beginning at 1:30 pm)		
<ul> <li>Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050</li> </ul>		
Successful bidder shall provide Technical Support sessions for other Departments which will be held at an Ocean County location specified by the requesting Department		
Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only		
Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service	П	П

	<u>COMPL</u> <u>YES</u>	IANCE NO
CHASSIS SPECIFICATIONS		
Current Model Year, or Newer, Ford F550 Regular Cab Dual Rear Wheels		
Four Wheel Drive		
60" Cab to Axle (CA)		
7.3L V8 gasoline engine		
40 gallon fuel tank		
TorqShift transmission with PTO option		
19,000 lb. GVWR		
Cab shall be military grade aluminum alloy for longevity to the County		
in lieu of carbon steel		
Frame shall be fully boxed under cab and "C" channel behind cab for easy	_	_
mounting of body		
Oil life monitor, engine hour and engine idle hour meters		
Air Conditioning		
Airbags, frontal driver & passenger, side impact and side air curtains		Ш
TowCommand integrated trailer brake controller, manual telescoping		
trailer tow mirrors		
7 wire trailer wiring harness (no plug)		Ш
AM/FM radio; SYNC Enhanced voice recognition communication and		
entertainment, 911 Assist, AppLink 4-2" LCD Center Screen, One (1) Smart charging USB Port SYNC	П	
Power windows, locks, mirrors, and heated mirrors		
Center High Mount Stop Lamp		
240 amp HD alternator, 12V 750 CCA battery		
Tilt and telescoping steering wheel		
4.88 ratio limited slip axle		
4 wheel power ABS brakes, front and rear disc, power steering, front	Ш	
and rear stabilizer bars	П	
Quad-beam jewel-effect halogen headlamps, five (5) roof marker lights		
LT225/70R19.5G BSW Traction tires – six (6)		
One (1) full sized spare tire mounted to wheel and one (1) jack		
Chrome front bumper, front tow hooks		
Chrome hub covers, front bumper grill		
Power Sliding Rear glass with defrost – sc/cc only		
Remote Start		
Halogen Fog Lamps		
40/20/40 split vinyl bench seat with center arm rest		
Auxiliary power point, six (6) upfitter switches located overhead center		
Tachometer, speedometer, oil pressure, transmission temp, engine temp,		
and fuel gauge		
Interval windshield wipers		
Driver & passenger grab handles		

	<u>COMPL</u> YES	IANCE NO
CHASSIS SPECIFICATIONS (Cont'd)		
Standard XL Rear view camera and prep kit		
3-year/36,000 mile bumper-to-bumper warranty on OE components		
5-year/60,000 mile powertrain warranty		
Shift on the fly		
Cab steps, molded black (running boards)		
Undercoating – entire truck chassis, underside of cab and underside of		
added body (dump, utility, platform) shall be coated with Tectyl 2423 Haps Free		
Black, or Z Guard Product, a low VOC, High Solids,		
Emulsion Corrosion preventing coating		
Snow plow prep package		
Single color to be selected from standard color chart at time of order		
ENCLOSED SERVICE BODY SPECIFICATIONS		
Body Shell		
Shall be constructed of 14 gauge two-sided A40 Galvanneal steel		
Compartment tops and backs and the compartment end panels shall be		
a one-piece seamless design		
All doors, door openings, drip rails, and other exposed steel edges shall be		
hemmed for strength, safety, and resistance to corrosion.		
Floor		
Shall be constructed of a minimum of 12 gauge treadplate with		
a 1 3/8" return flange on each side		
Side compartment back panel should overlap and interlock with		
the floor flange, providing support for the weight of the side compartment.		
Understructure		
Cross sills shall be constructed from 11 gauge steel with 50,000 PSI minimum		
yield strength.		
Compartment Doors		
Side compartment doors shall be constructed of 20 gauge two-sided A40		
Galvanneal Steel		
Shall be double paneled with internal reinforcements for durability		
Hinges		
Corrosion resistant, all stainless steel, continuous hinges shall be installed to		
provide full length support for the doors and pry-proof security with a built-in		_
weather shield		

ENCLOSED SERVICE BODY SPECIFICATIONS (Cont'd)	YES YES	NO NO
Hinges (Cont'd) Hinges for the side compartment doors shall be spot welded to the door frames		
Hinges for both the rear doors and the conduit chute doors shall be attached with non-corrosive aluminum rivets with stainless steel mandrels.  Hinges must be supported with a six year warranty		
Rotary Latches Corrosion resistant rotary latches shall be secured to the door panels by four (4) threaded studs attached to the back of the latches		
Shall have zinc die cast handles with a brushed chrome finish that provides ample hand clearance surrounded by an injection molded glass and mineral infused UV resistant nylon housing		
Shall also have an internal injection molded glass and mineral infused UV resistant nylon cover for protection from the contents of the compartments		
Shall be slam-latchable		
Latching cams shall be elongated to allow the latches to move vertically relative to the lock strikes to prevent torsional damage		
Microcellular urethane foam gaskets shall be installed between the latch flange and the outer door skin to prevent moisture from entering the compartment behind the latch		
Lock cylinders shall be flush mounted for additional security		
<b>Door Strikers</b> Adjustable strikers shall be affixed to the side compartment door frames with screws (welded-on door strikers are <b>NOT ACCEPTABLE</b> )		
<b>Door Seals</b> Automotive "bulb type" neoprene door seals shall be installed by the manufacturer of the body on all door frames		
<b>Door Retainers</b> Double spring over center door retainers shall be installed on all vertical doors		
Door retainers must hold doors in positive open or closed position (other types of retainers, like cables or chains are <b>NOT ACCEPTABLE</b> for vertical doors)		
Horizontal doors shall be secured in an open position parallel to the ground by heavy duty chain retainers		

	COMPLIAN YES	NCE NO
ENCLOSED SERVICE BODY SPECIFICATIONS (Cont'd) Door Retainers (Cont'd)		
Chain retainers must be easily removable so that the door can be opened to a full 180° to be able to access the compartment in tight areas.		
Shelving Shall be constructed of 18 gauge bright spangled galvanized steel		
Shall have hemmed dividers on 4" centers		
Shelves must have a minimum capacity rating of 250 lbs		
Interior Light Guards Light guards shall be installed by the body manufacturer to provide protection for recessed stop/tail/turn and backup lights		
Wiring harness must also be protected		
Master Lock System  Each lower side pack on the body shall include a sliding bar master lock that secures all of the doors along that side of the body with an exterior padlock		
Each master lock bar shall be spring-loaded to hold the sliding bar in the open position so the side doors are only obstructed when the master lock is being held into place by a padlock		
Interior Dome Lights The cargo area of the body shall be illuminated by two (2) overhead dome lights switched at the rear of the body thus eliminating the need to climb into the load area to operate the lights		
Roof Construction Shall be constructed of 16 gauge A40 Galvanneal steel		
Shall be tapered and crowned across the top for additional strength		
Shall be reinforced by cross braces and shall feature two (2) lockable rear conduit chute doors (one (1) on each side)		
Conduit chute doors shall have corrosion resistant zinc plated rotary latches		
Latches shall be slammable and shall be keyed the same as the rest of the exterior doors		
Shall have adjustable door strikers attached to the door frames with screws		

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ENCLOSED SERVICE BODY SPECIFICATIONS (Cont'd)	<u>YES</u>	<u>NO</u>
Roof Construction (Cont'd)		
Roof shall have two (2) access doors each side with chrome T-latches.		
Rear Cargo Doors		
Shall be a double panel construction with a 20 gauge		
A40 Galvanneal steel outer panel and a 14 gauge Galvanneal steel inner liner		
Shall have a nitrogen gas door retainer to assist in both the opening and closing of the door		
Shall be designed so that all door rods and latching hardware is concealed between the outer door panel and interior door liner		
Shall be available with or without glass.		
If glass is selected, specifications consist of a minimum of 7" x 24" fixed tempered glass window installed in each door and protected by an 18 gauge bright spangled galvanized steel punched window guard		
Exterior Prime Paint Shall be completely immersed in electrodeposition gray epoxy prime paint featuring a zinc phosphate precoat and seal for additional corrosion protection		
Prime paint shall be oven cured to provide a hard durable finish		
Final finish color shall match color of cab, base coat clear coat		
Interior Paint Interior paint shall be a mid-gloss, mar resistant, light gray finish		
Undercoating The body shall be completely undercoated by the body manufacturer using a water based acrylic		
Warranty The following items shall be covered by a ten (10) year limited warranty:		
No Rust-Through Guarantee		
Continuous Door Hinges – Guaranteed not to fail to operate or come off body		
Latches and Lock Cylinders – Guaranteed against failure		

ENCLOSED SERVICE BODY SPECIFICATIONS (Cont'd)	<u>COMPL</u> <u>YES</u>	LIANCE NO
Warranty (Cont'd) Shelves – Guaranteed not to fail in bending under a maximum 250 lb. rated load.		
Lighting Lighting shall meet all FMVSS standards		
Wiring harness shall be encased in a plastic loom and all wires shall be colored for ease of troubleshooting		
Wire harness must have connectors that are compatible with the specified chassis without splicing		
Stop/tail/turn and backup lights shall be surface mount with built in strobe		
The stop/tail/turn/reverse shall be surface mount with built in strobes		
All marker, clearance, and R.I.D. lighting shall be LED type lighting (Incandescent lights in any of these locations are <b>NOT ACCEPTABLE</b> )		
Dimensions  Knapheide Model KC108L2094J  Length 107.25" without bumper  Width 94"  Compartment Depth 20"  Overall Height 68"  Clear Door Width 49.5"  Clear Door Height 40"  Interior Clear Height 51.1"  Body Weight 2,093 lbs.		
<ul> <li>Streetside Compartment Configuration</li> <li>First Vertical: 35.25" x 40"</li> <li>Horizontal: 44.75" x 18.5"</li> <li>Rear Vertical: 27.25" x 40"</li> </ul>		
<ul> <li>Curbside Compartment Configuration</li> <li>First Vertical: 35.25" x 40"</li> <li>Horizontal: 72" x 18.5"</li> <li>Rear Vertical: 27.25" x 21.5"</li> </ul>		
Accessory Lighting Compartment lighting must be LED; each compartment must have one vertical and one horizontal light fit to size		

<u>CLOSED UTILITY SERVICE BODY, AS SPECIFIE</u>	<u>.D, OR EQUAL</u> (CON 1/1	J)	
		<b>COMPLI</b>	<b>ANCE</b>
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	YES	NO
ENCLOSED SERVICE BODY SPECIFICATIONS (Cont'd) Accessory Lighting (Cont'd)		
Whelen Amber LED Lights		
Body upfitter must provide installation of lights so they work in conjunction with the equipment on the truck:		
<ul> <li>Atomic Amber LED Lights</li> <li>Four (4) Micron Series Super LED in grille</li> <li>Whelen Micron 3 ½", two (2) in rear, one (1) each side with stop tail turn lights</li> <li>Four (4) 700 Series Super LED light heads at rear, one (1) each side of body mounted higher on body, and two (2) mounted in front of body higher than cab</li> </ul>		
Whelen Traffic Advisor TIR3 Super LED:		
<ul> <li>Mounted above rear doors lower than the roof line</li> <li>Eight (8) module 1 <sup>3</sup>/<sub>4</sub>" x 2 3/16" x 30 1/16"</li> </ul>		
Controller for multi-pattern configuration		
Accessories		
Sleeve Adapter HC3Z-19H282-A	Ш	
Pipe Vise and Bracket:  • Wilton 6 ½" Swivel Pipe Vise  • Wilton Pipe Jaws		
Bracket Mounted     To fit in Class Whiteh		
• To fit in Class V hitch	Ш	
<ul> <li>Recessed Galva Grip Bumper:</li> <li>Class V Receiver hitch</li> <li>Pollak 7 pole RV style harness twist and lock plug (Harness Part # 11-998, or eq</li> </ul>	11a1·	
7-Way Plug Part # 11916P, or equal)  • Back up alarm Preco 102 Db	<u></u>	
<ul> <li>3-ball receiver tube 1 7/8", 2", 2 5/16" locking hitch pin</li> <li>6 ton receiver mount Pintle &amp; 2" ball combination hitch</li> </ul>		
DOT safety kit, first aid kit, and 10 lb. fire extinguisher w/bracket and safety triangles		
Conspicuity enhancement:  • 2" red and white diamond grade reflective striping on face of bumper		
<ul> <li>6" red and yellow inverted V on rear of body compartment face</li> </ul>		
OPTIONS  3A. Upgrade chassis to Super Cab chassis, retaining 60" Cab to Axle		

	<b>COMPLIANCE</b>	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
OT HONS (Cont u)		
3B. Upgrade chassis to Crew Cab chassis, retaining 60" Cab to Axle		
3C. Upgrade to Regular Cab chassis with 84" Cab to Axle		
3D. <u>Upgrade to Super Cab chassis with 84" Cab to Axle</u>		
3E. Upgrade to Crew Cab chassis with 84" Cab to Axle		
<b>3F.</b> Medium Height Enclosed Body Upgrade Upgrade specified enclosed body to medium height, Knapheide model KC108M2094J:		
<ul> <li>Dimensions: <ul> <li>Length 107.25" without bumper</li> <li>Width 94"</li> <li>Compartment Depth 20"</li> <li>Overall Height 78"</li> <li>Clear Door Width 49.5"</li> <li>Clear Door Height 50"</li> <li>Interior Clear Height 61.1"</li> <li>Body Weight 2,112 lbs.</li> </ul> </li> <li>3G. <u>High Height Enclosed Body Upgrade</u> <ul> <li>Upgrade specified enclosed body to high height, Knapheide model KC108H2094J:</li> </ul> </li> <li>Dimensions: <ul> <li>Length 107.25" without bumper</li> </ul> </li> </ul>		
<ul> <li>Width 94"</li> <li>Compartment Depth 20"</li> <li>Overall Height 90"</li> <li>Clear Door Width 49.5"</li> <li>Clear Door Height 62"</li> <li>Interior Clear Height 73.1"</li> <li>Body Weight 2,232 lbs.</li> </ul>		

ENCEOSED CHEFT SERVICE BODT, AS STEERIED, ON EQUAL	COMPLIANCE	
	<b>YES</b>	NO
OPTIONS (Cont'd)		
3H. 11 Foot Low Height Enclosed Body Upgrade For Use With 84" CA Chassis		
Upgrade specified enclosed body to 11 foot Knapheide model KC132L2094J	_	
for 84" CA chassis application		
Dimensions:		
• Length 133.25" without bumper		
• Width 94"		
• Compartment Depth 20"		
• Overall Height 68"		
• Clear Door Width 49.5"		
• Clear Door Height 40"		
• Interior Clear Height 51.1"		
• Body Weight 2,506 lbs.		
Streetside Compartment Configuration		
• First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
• Horizontal: 52.75" x 18.5"		
• Rear Vertical: 25.25" x 40"		
<b>Curbside Compartment Configuration</b>		
• First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
• Horizontal: 52.75" x 18.5"		
• Rear Vertical: 25.25" x 40"		
3I. 11 Foot Medium Height Enclosed Body Upgrade For Use With 84" CA Chassis		
Upgrade specified enclosed body to 11 foot Knapheide model KC132M2094J for		
84" CA chassis application		
Dimensions:		
• Length 133.25" without bumper		
• Width 94"		
• Compartment Depth 20"		
Overall Height 78"		
• Clear Door Width 49.5"		
• Clear Door Height 50"		
• Interior Clear Height 61.1"		
• Body Weight 2,532 lbs.		
Streetside Compartment Configuration		
• First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
• Horizontal: 52.75" x 18.5"		

### <u>ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH</u>

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	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd)	. (6)	
31. 11 Foot Medium Height Enclosed Body Upgrade For Use With 84" CA Chass	<u>is</u> (Cont'd)	
Curbside Compartment Configuration		
• Rear Vertical: 25.25" x 40" First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
• Horizontal: 52.75" x 18.5"		
• Rear Vertical: 25.25" x 40"		
3J. 11 Foot High Height Enclosed Body Upgrade for Use with 84" CA Chassis		
Upgrade specified enclosed body to 11 foot Knapheide model KC132H2094J for		
84" CA chassis application		
Dimensions:		
• Length 133.25" without bumper		
• Width 94"		
• Compartment Depth 20"		
• Overall Height 90"		
• Clear Door Width 49.5"		
• Clear Door Height 62"		
• Interior Clear Height 73.1"		
<ul> <li>Body Weight 2,652 lbs.</li> </ul>		
5 Body Weight 2,032 los.		
<b>Streetside Compartment Configuration</b>		
• First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
• Horizontal: 52.75" x 18.5"		
• Rear Vertical: 25.25" x 40"		
<b>Curbside Compartment Configuration</b>		
• First Vertical: 34.25" x 40"		
• Second Vertical: 21" x 40"		
<ul> <li>Horizontal: 52.75" x 18.5"</li> </ul>		
• Rear Vertical: 25.25" x 40"	П	
Real Vertical. 23.23 X 40		
3K. Aluminum Body Upgrade from Steel		
All accessories shall be the same at the steel body specifications		
Body Shell		
Constructed of .09" H5052 Aluminum.		
Body shell shall be supported by structural 6061 T6 Aluminum extrusions	$\square$	1 1

OPTIONS (Cont'd)	<u>COMPLIAN</u> <u>YES</u>	<u>CE</u> <u>NO</u>
3K. Aluminum Body Upgrade from Steel (Cont'd)		
<b>Floor</b> Constructed of interlocking, extruded 6061 T6 Aluminum planks with locking aluminum end rails and aluminum side rails with a 1 3/8" return flange on each side		
Side compartment back panel should overlap and interlock with the floor flange to support the weight of the side compartment	rt	
Understructure Support structure constructed from 11-gauge steel long sills, and a 10-gauge steel cross sills with 50,000 psi minimum yield strength		
<b>Doors</b> Box structure, double paneled with a minimum of .08" aluminum outer panel, corners formed continuously		
Inner door panel shall be minimum of .06"		
Hinges Corrosion resistant aluminum with stainless steel rod. Continuous hinges shall be installed to provide full length support for the doors and pro-proof security		
Hinges are to be applied with structural adhesive and rivets to the door frames; must be supported with a 10-year warranty.		
Rotary Latches  Corrosion resistant rotary latches shall be secured to the door panels by four (4) fasteners attached to the back of the latches.		
Latches must have zinc die cast handles with a brushed chrome finish that provides ample hand clearance surrounded by an injection molded glass and mineral infusion UV resistant nylon housing.		
Latches shall also have internal injection molded glass and mineral infused UV resistant nylon cover for protection from the contents of the compartments.		
Shall be slam-latchable		
Latching cams are to be elongated to allow the latches to move vertically relative to the lock strikes to prevent torsional damage		

	<u>COMPLIA</u> YES	NCE NO
OPTIONS (Cont'd)	<u>I LS</u>	110
3K. Aluminum Body Upgrade from Steel (Cont'd)		
Rotary Latches (Cont'd) Microcellular urethane foam gaskets are to be installed between the latch flange		
and the outer door skin to prevent moisture from entering the compartment		
behind the latch.		
Lock cylinders are to be flush mounted		
Door Strikers		
Shall be affixed to the side compartment doorframes with screws; welded on		
are NOT ACCEPTABLE		
Door Seals		
Automotive "bulb type" neoprene door seals shall be installed on all doorframes		
Door Retainers		
Nitrogen gas strut door retainers are to be installed on all vertical doors. Door retainers		
need to hold doors in positive open or closed position. ANY other type of		
retainer is NOT ACCEPTABLE	Ц	
Horizontal doors shall be secured in an open position parallel to the ground by		
heavy duty chain retainers. Chain retainers must be easily removable so the door		
can be opened to at least 150° to be able to access the compartment in tight areas.		
Shelving		
Shall be constructed o .06" aluminum.		
All shelves shall have molded, infinitely adjustable sliding dividers.		
Shelves need to have minimum capacity of 250 lbs.		
Master Lock System		
Each lower side pack on the body shall include a sliding bar master lock that secures		
all of the doors along that side of the body with an exterior padlock (County provided).		
Each master lock bar shall be spring loaded to hold the sliding bar in the open position		
so the side doors are only obstructed when the master lock is being held into place with		
key coded locks to match ignition key		
Interior Light Guard		
Shall be installed by the body manufacturer to provide protection for light mounting		
hardware, light connection points, and wiring harness.	$\Box$	$\Box$

are **NOT ACCEPTABLE**.

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL (CONT'D) COMPLIANCE YES NO **OPTIONS (Cont'd)** 3K. Aluminum Body Upgrade from Steel (Cont'd) **Interior Light Dome** Cargo area of the body shall be illuminated by an overheard dome light, switched at the rear of the body **Roof Construction** Roof shall be constructed of .09" H5052 aluminum. Shall be tapered and crowned across the top Roof shall be reinforced by cross braces and shall feature two (2) lockable rear conduit chute doors – one (1) on each side Conduit chute doors shall have corrosion resistant rotary latches and shall be slam-latchable and keyed to match all other exterior doors. Door shall have adjustable door strikers attached to the doorframes with screws. **Rear Cargo Doors** Shall be constructed of .09" H5052 Aluminum for outer panels and inner liner. Each door shall have nitrogen gas door retainer to assist in both the opening and closing of the door Each door shall be designed so that all door rods and latching is concealed. Rear cargo doors are constructed with or without glass – to be selected at time of order  $\Box$ **IF Glass is selected**: Minimum 9" X 30" fixed tempered glass window installed in each door and protected by an aluminum window guard. **Bulkhead** Shall be of ABS material. Body shall have sliding door to access the cargo area from the cab. Bulkhead door shall have slam-latch handle on both sides of the door which can be locked from the cab side. П Bulkhead door is to open and close on stainless steel ball bearing slides. Door hinges

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OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
3K. Aluminum Body Upgrade from Steel (Cont'd)		
Exterior Prime Paint Epoxy prime paint with a minimum of 1.2 mm coat. Prim paint shall be oven cured to provide a hard finish		
Interior Paint Interior Paint is to be mid-gloss, mar resistant, buff finish		
<ul> <li>Warranty</li> <li>The following shall be covered by a minimum 10-year limited warranty: <ul> <li>No failure due to corrosion</li> <li>Continuous door hinges; guaranteed not to fail to operate or come off product</li> <li>Latches and Lock Cylinders – unconditional guarantee against failure</li> <li>Shelves – guaranteed not to fail in bending under a maximum of 250 lb. load.</li> </ul> </li> </ul>		
Lighting Shall meet all FMVSS standards.		
Wiring harness shall be encases in a mesh loom and all wires are to colored for ease of troubleshooting.		
Wire harness shall have connectors that are compatible with OEM chassis without splicing		
Rear lighting system to feature surface mount, stop/tail/turn/backup lights with LED strobe having eight (8) selectable patterns and built in reflectivity for safety.		
Lighting system shall feature all LED type lighting, incandescent or other lighting is <b>NOT ACCEPTABLE</b>		
LED Compartment Lighting Each compartment shall have one (1) full length vertical and horizontal light to illuminate full compartment	e	

**COMPLIANCE** YES NO

#### **OPTIONS** (Cont'd)

#### 3K. Aluminum Body Upgrade from Steel (Cont'd)

#### **Dimensions**

Knapheide AKC110L2094

Length: 109"Width: 94"

• Compartment Depth: 20"

Overall Height: 68"Clear Door Width: 50"

• Clear Door Height: 44"

• Interior Clear Height: 50"

• Body Weight: 969 lbs.

#### Compartment Configuration

First Vertical 36" X 40"

• Horizontal 45" x 18 ½"

• Rear Vertical: 28" X 40"

#### **Shelving Configuration**

- Two (2) Shelves First Vertical Each Side
- One (1) Shelf Horizontal Curbside
- Two (2) Shelves Rear Vertical Each Side

#### 3L. Medium Height Enclosed Body Upgrade

Knapheide AKC110M2094

#### **Dimensions:**

- Length 109"
- Width 94"
- Compartment Depth 20"
- Overall Height 78"
- Clear Door Width 50"
- Clear Door Height 54"
- Interior Clear Height 60"
- Body Weight 1006 lbs.

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL (CONT'D)

**COMPLIANCE** YES NO

#### **OPTIONS (Cont'd)**

#### 3M. High Height Enclosed Body Upgrade

Knapheide AKC110H2094

#### **Dimensions**

- Length 109"
- Width 94"
- Compartment Depth 20"
- Overall Height 90"
- Clear Door Width 50"
- Clear Door Height 66"
- Interior Clear Height 72"
- Body Weight 1050 lbs.

#### 3N. 11' Medium Height Enclosed Body Upgrade for Use with 84" CA

Knapheide AKC132M2094

#### **Dimensions**

- Length 133"
- Width 94"
- Compartment Depth 20"
- Overall Height 78"
- Clear Door Width 50"
- Clear Door Height 54"
- Interior Clear Height 60"
- Body Weight 1180 lbs.

#### **Compartment Configuration for 133" Bodies**

- First Vertical: 36" X 40"
- Second Vertical: 24" X 40"
- Horizontal: 45" X 18 ½"
- Rear Vertical: 28" X 40"

#### **Shelving Configuration**

- Two (2) Shelves First Vertical Each Side
- Two (2) Shelves Second Vertical Each Side
- One (1) Shelf Horizontal Curbside
- Two (2) Shelves Rear Vertical Each Side

#### ITEM #3 - CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH E

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COMPL	<b>IANCE</b>
YES	NC
	(D)  COMPL  YES

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Knapheide AKC132H2094

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- Length 133"
- Width 94"
- Compartment Depth 20"
- Overall Height 90"
- Clear Door Width 50"
- Clear Door Height 66"
- Interior Clear Height 72"

• Body Weight – 1227 lbs.	
3P. Side Access Doors in Roof  Two (2) per side binged at ten with gas enrings	
Two (2) per side hinged at top with gas springs	
(Note: If 60" Front Vertical is a chosen option, only one (1) door on that side)	
3Q. Bottle Retainer Compartment	
• 60" H X 35 ¼" W X 20" D	
<ul> <li>Two (2) hooks for cords</li> </ul>	
Bottle Holder	
<ul> <li>Victor Journeyman 450 Heavy Duty Outfit 540/300 SR Regulators – Torch Set</li> <li>3M. BASF DTE Liner AXALTA</li> </ul>	
<ul> <li>Coating cargo area up to first shelf bumper</li> </ul>	
3R. <u>BASF DTE Liner AXALTA</u> Coating cargo area up to first shelf, and rear bumper	
<ul> <li>3S. Whelen 900 Series Super LED Scene Lights</li> <li>Whelen 900 Series Gradient Opti-Scenelight:</li> </ul>	
<ul> <li>LED White Light only – mounted on side of enclosed body for work light area</li> <li>3N. Whelen 900 Series Super LED Scene Lights (Cont'd)</li> </ul>	
<ul> <li>Has sixteen (16) White Super LED lights</li> </ul>	
Clear optic hard coated polycarbonate lens and utilizes a metal reflector	
with integrated TIR hybrid optics for maximum output	
Chrome plated flange for Opti-Scenelight	
Enclosed body shall use 1 to 3 lights per side (user Department shall determine	
amount at time of order) (Up to six (6) lights per vehicle)	

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ENCEOSED CHEFT SERVICE BODI, AS STECHTED, OR EXCELL	<b>COMPLI</b>	ANCE
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
3T. Inverter  AIMS Pure Sine 4000 Watt Inverter, placement to be decided at time of order  • Peak Power 12,000 Watt surge rating		
• 12 Volt		
Installed with two (2) auxiliary batteries		
Additional GFI outlet with weather proof protector located at end users placement		
<ul> <li>Isolation Solenoid</li> <li>When truck is running it is charging auxiliary batteries and when truck is off it is only running off auxiliary batteries</li> </ul>		
3U. BASF Spray Liner on Floor and Sides of Cargo Area		
3V. BASF Spray Liner on Floor of Compartments		
<ul> <li>3W. Hide-A-Way Bumper Crane</li> <li>Western Mule S-1350 Fold-A-Way Crane:</li> <li>1350 lbs. capacity</li> <li>Aluminum bumper cover and fold down rear grip strut</li> <li>LED light package</li> </ul>		
<ul> <li>3X. Whelen LED Liberty II Solo IX 48" Light Bar</li> <li>Light Bar LED Liberty II Solo IX 48", all modules filled with amber LED</li> <li>No light modules on rear of light bar (front only)</li> <li>Alley lights and takedowns are to be white</li> <li>Twelve (12) scan lock flash patterns</li> <li>Controller</li> <li>Mounted on top of cab</li> </ul>		
<ul> <li>3Y. <u>Light Color Option for Liberty II Solo IX 48" Light Bar</u></li> <li>Light Color Option: <ul> <li>Red and blue modules in lieu of amber for Sheriff's Department</li> <li>Determined Left/Right Side and Red/Blue at time of order with Amber</li> <li>Arrow Stick at Rear</li> </ul> </li> </ul>		
<b>3Z.</b> Emergency Lighting LED Body Lights Red Blue Split, 3 ½" Super LED clear lens with red and blue lights shall be installed.		

Hose Reel: 50' of ½" I.D. air line

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL (CONT'	<b>D</b> )	
	<b>COMPLIANCE</b>	
OPTIONS (Condid)	<u>YES</u>	<u>NO</u>
<u>OPTIONS</u> (Cont'd) 3AA. <u>Maxon Liftgate</u>		
C2-54-1642-TP38 Liftgate 55" x 38" +4		
Aluminum Extruded 2-Piece Platform		
1600 pound capacity		
For use with utility bodies with openings of 54-61"		
3BB. Subfloor		
6" High full length sub floor for enclosed body	Ш	
<b>3CC.</b> <u>Transverse Compartmen</u> t First Vertical Full Transverse Compartment:		
Three (3) draw pull out both street and curbside (Note: When ordered with C-Tech Drawer Unit, transverse is curbside only)		
<ul> <li>3DD. C-Tech Drawer Unit</li> <li>Drawer Unit to be installed in Street side first vertical: <ul> <li>Drawers shall be 250 lbs. rated</li> <li>28" x 17.5"</li> <li>.08", 5052 aluminum alloy construction</li> <li>40" Compartment Height Configuration</li> <li>One (1) 7" Deep Drawer</li> <li>Two (2) 5" Deep Drawers</li> <li>Three (3) 3" Deep Drawers</li> <li>This eliminates full transverse compartment if selected; goes to only back of Compartment</li> </ul> </li> <li>3EE. Air Compressor, 70 CFM <ul> <li>VMAC VR70 Underhood Rotary Screw Compressor</li> <li>70 CFM, 175 PSI</li> <li>3 gallon receiver tank</li> <li>Control panel Throttle control</li> <li>Filter/Regulator/Lubricator</li> <li>Relief/Shut-Off valves with all required fittings</li> </ul> </li> </ul>		

(***	COMPLIANCE	
	<b>YES</b>	NO
OPTIONS (Cont'd) 3FF. Air Compressor, 150 CFM		
VMAC VR150 Underhood Rotary Screw Compressor		
• 150 CFM, 175 PSI		
<ul> <li>3 gallon receiver tank</li> </ul>		
Control panel Throttle control		
• Filter/Regulator/Lubricator		
<ul> <li>Relief/Shut-Off valves with all required fittings</li> <li>Hose Reel: 50' of ½" I.D. air line</li> </ul>		
• Hose Reel: 50' of ½" I.D. air line		Ш
3GG. Go-Lights, Model 3024		
Go Light Stryker Work Lights (Up to four (4) per vehicle)		
Permanently mounted on stainless steel brackets, front and/or rear (user		
Department shall determine location)	П	
2 - p	_	_
6000 maximum lumens		
5 amp draw		
9-32 VDC input		
3HH. 9' Readily Detachable Western Snow Plow System		
Blade Assembly		
Moldboard – 12 gauge (0.104") steel sheet formed to a 17.3" radius		
with a 1.76" diameter top curl		
Ribs – Eight (8), 0.25" thick, variable profile, electrically welded to sheet,		
torsion tube and 0.25" thick, high strength steel base channel		
Torsion Tube – 2" diameter, full width, electrically welded to all eight ribs.		
Cutting Edge – Reversible 0.5" x 6" high carbon steel C1080 attached with		
ten (10) 0.63" Grade 5 carriage bolts.		
Disc Shoes – Two (2), full rotation, height adjustable, Austempered Ductile		
Iron shoes with integral 1" diameter shaft secured to blade with lynch pins.		
Shoe brackets shall be welded to vertical ribs.		
Plada Trin 50 dagraa full blada trin		
Blade Trip – 50 degree full blade trip	Ш	
Trip Springs – Four (4), 2.38" OD x 0.39" diameter, C1060, hard drawn,		
stress relieved wire, preloaded, with 0.63" x 4" eyebolts.		

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL (CONT'D) **COMPLIANCE** YES NO **OPTIONS (Cont'd)** 3HH. 9' Readily Detachable Western Snow Plow System (Cont'd) **Blade Assembly (Cont'd)** Shock Absorbers – Two (2), 5" stroke, shielded shock absorbers to retard extension velocity and dampen blade trip return.  $\Box$ Blade Trip Pivot – Three (3) 0.75" diameter steel pins. Blade Guides – Two (2) highly visible, vinyl coated, spring wound, with replaceable flags. Plow Angling – 30 degrees right and left. A-Frame Electrically welded, reinforced, 3" x 3" x 0.19" wall structural steel side tubes with 0.50" thick, formed nose plate and integral attachments for angling rams to receive 1" diameter pins. Lift Chains – Two (2), 0.25" Grade 43 high test steel with 2,600 lb. working load limit, attached with 0.38" U-bolts. Quadrant Electrically welded, reinforced, 5" OD x 0.25" wall structural steel tube with 0.50" thick nose plates and integral attachments for angling rams to receive 1" diameter pins. A-Frame to Quadrant Angle Pivot – 1" diameter Grade 5 bolt Lift Frame Lift frame to have provision for attachment of out front hydraulics and light kit. Lift Arm – 0.25" x 2" formed bar welded with a 7 gauge steel cover. Two Plow Stands – Self-storing and adjustable integrated into the plow attachment mechanism. Connecting hook and lever with integral 0.50" lock pin Two piece lift frame with tubular construction Lower lift frame to include drive in plow alignment horns Mount Custom designed, electrically welded, structural steel mounting readily adaptable to truck frame Attached to truck with Grade 5 fasteners 

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

OPTIONS (Cont'd)	<u>COMPL</u> <u>YES</u>	IANCE NO
3HH. 9' Readily Detachable Western Snow Plow System (Cont'd)		
Mount (Cont'd) Vehicle, with mount attached, shall meet Federal Motor Vehicle Safety		
Standards by compliance or by vehicle manufacturing approval.		
Removable receiver brackets for additional ground clearance.		
Paint Plow blade shall be made of shot blasted steel and cleaned with phosphate solutions and have baked-on red polyester powder coating.		
Hydraulics Electric solenoid activated and detachable with lift		
Front mounted hydraulic unit consisting of a fixed displacement gear pump, with 1750 PSI system relief, direct tang driven by a 4 ½" 12 volt DC motor		
Pump with filter screen shall be immersed in a steel deep drawn reservoir		
Main valve manifold shall contain three (3) side mounted and covered solenoid cartridge valves		
Cushion relief valves set at 4,000 PSI and a quill adjustment screw to adjust blade drop speed		
One (1) 1 1/2" x 8" lift ram and two (2) 1 1/2" x 12" double-acting angling rams each with a rod seal, a wiper ring and a packing nut.		
Hydraulic hoses shall be 1/4" steel braided SAE 100R1		
Hydraulic unit shall be controlled by a soft touch, hand held in-cab control.		
Control shall be equipped with an on/off and mode buttons and indicator lights		
Control can be dash mounted.		
Control shall provide a single button movement of angle right or left (hydraulically locked)		
In-cab control shall be connected to valve manifold and to the motor through an auxiliary 12-volt multiplexed harness		
Power and control harness to have quick disconnects and covers at the grille		
Control shall allow plow to be in float when lowered		

Department at time of order)

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH ENCLOSED UTILITY SERVICE BODY, AS SPECIFIED, OR EQUAL (CONT'D)

**COMPLIANCE** YES NO **OPTIONS (Cont'd)** 3HH. 9' Readily Detachable Western Snow Plow System (Cont'd) **Hydraulics (Cont'd)** Unit shall be a "low side" drive system, which provides positive potential continuously with a switched ground to control the solenoids Unit shall possess programmable security lockout feature Unit shall possess programmable hydraulic soft stop feature Unit shall possess programmable one touch float feature Hydraulic fluid shall be MIL5606 equivalent standard transmission fluid (ATF) or aircraft hydraulic oil for low-temperature operation. Cycle times: Lift, 2.0 seconds; Angle, 1.5 seconds Unit shall stay with plow when plow is disconnected from truck Lights Night Hawk LED Plow Lights Headlights Comprised entirely of light emitting diodes using solid optic elements for low beam and high beam lights П A reflected LED light for the side lighting using EdgeView Technology П DRL/Park lights using white lights behind a frosted filter, turn signal utilizing amber lights behind the same frosted filter Plow Removal Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be easily removed from truck as one complete unit **Accessories with Plow** Snow deflector Curb guard right and left Cab command Hand Held Control or Joystick (to be chosen by user

### ITEM #3 – CURRENT MODEL YEAR, OR NEWER, FORD F550 REGULAR CAB WITH

ENCLOSED UTILITY SERVICE BODY, .	AS SPECIFIED, C	OR EQUAL (	(CONT'D)	
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LITCLOSE	D CHEH SI	ZKYTCL BOD	1,115 STECHTED, ON EQUILE (CO.	COMPL YES	IANCE NO
<b>OPTIONS</b>	` '				
	Department Pai		<del></del>		
School Bus	Yellow from the	e bottom of the	windows down		
Academy B cab roof and		the bottom of the	he windows up to and including		
	om bottom of win oad department f	-	oint on the hood to make a "V" and		
	se coat clear coat all Vehicles will		way)		
<ul> <li>12,0</li> <li>Mot</li> <li>Elec</li> <li>Rem</li> <li>Gear</li> <li>Clut</li> <li>Brak</li> <li>Drur</li> <li>Rop</li> </ul>	lel Year Grille G 00 lbs. Single Li or: Series Woun trical Controls: O note Control: Ren rtrain: 3-stage plan r ration: 216:1 ch (free spooling te: Automatic m m Diameter/Len e: 3/8" x 80' stee rformance Spec	ine d, 12V DC, 24' Contractor mote Switch, 12 anetary g): Rotating rin echanical cone gth: 3.15"/9.0" el	2' lead g gear		
Line Pull - Lbs. 0 2000 4000 6000 8000 10000 12000	- Line Speed - Ft. 28.1 14.2 9.3 7.8 6.4 4.3 3.3	Motor Current 66 amps 141 amps 209 amps 272 amps 335 amps 401 amps 469 amps	Pull by Layer/Lbs. 1/12000 2/9894 3/8117 4/7324		
Winch Dim Integrated c	<b>iensions:</b> onfiguration: 24	.25" Lx 7 15"	D x 10.52" H	П	
integrated c	omiguiadon. 27	.2J LA [.13	DA 10.02 11	ш	
Low-Profile	e configuration:	24.25" L x 7.15	5" D x 7.84" H		
Mounting 1	Bolt Pattern:				

	COMPLIANCE	
	<b>YES</b>	<u>NO</u>
OPTIONS (Cont'd)		
3JJ. <u>Winch</u> (Cont'd) Winch Mount Grille Guard/ Head Lamp Guard Kit		
Weight: 148 lbs.		
<ul> <li>Dimensions: 89" x 37" x 38"</li> </ul>		
• 16,500 lb. straight line pull		
• 14 gauge 1.5" steel tube		
• Center Crossbars: 1.5" diameter tubing		
Removable headlight area cross bars		
<ul> <li>Double hood bar design</li> </ul>		
Powder coated black		
Warranty:		
Material and Workmanship: Lifetime of winch		
Electric Components: 7 years		
Winch Mount Grille Guard: 3-year warranty		
Fairlead: Roller		
Recommended battery: 650 CCA minimum for winching		
Battery Leads: 2 gauge, 72"		
3KK. Husky 815-Piece Mechanic's Tool Set		
Key Features:		
Alloy Steel Construction  SAF: 124 A. S.		
SAE and Metric Sizes     Weight 178 lbs.		
• Item Weight: 178 lbs.  Tool Set	Ш	
Husky Mechanic Tool Set (815 pieces) Part # H815MTS		
Includes:		
• 433 sockets		
• 230 accessories		
• 145 various wrenches (standard combination, stubby, ratcheting, stubby ratcheting, flex head ratcheting, reversible ratcheting and specialty)		
<ul> <li>7 ratchets,</li> </ul>		
• 72-tooth quick release ratchet		
"No Questions/No Receipts" Lifetime warranty		
Impact Sockets		
Dewalt – DWMT 19242 1/2" Drive metric deep impact socket set (26 pieces)		

	<u>COMPL</u> <u>YES</u>	IANCE NO
<u>OPTIONS</u> (Cont'd) 3KK. <u>Husky 815-Piece Mechanic's Tool Set</u> (Cont'd)		
Impact Socket (Cont'd)  Dewalt – DWMT 19239 ½" Drive SAE Deep impact socket set (19 pieces)		
Limited Lifetime Warranty		
Impact Wrench Milwaukee M18 Fuel 18 Volt Litium Ion Brushless, Cordless ½" impact wrench with friction ring kit		
Two (2) 5.0 Ah batteries		
5 Year Warranty/Tool		
3 Year Warranty/Battery		
3LL. <u>Truck Steel Air/Hydraulic Service Jack</u> Material: Steel		
Lifting Capacity: 22 Tons		
Lifting Height Min: 8 ½"		
Lifting Height Max: 17"		
Power Raise: 4 5/8"		
Chassis Length: 22"		
Operation Type: Air		
Retracted Length: 8 1/2"		
Handle Length" 47 3/8"		
Standards: ANSI, ASME and PALD 2009		
1-year Limited Warranty		

		<u> JANCE</u>
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
3MM. 1700 Peak Amp 12 Volt Jump Starter		
1700 Peak Amps		
425 Cranking Amps		
PROFORMER Battery Technology		
46 inch heavy-duty #2 AWG cables		
Voltmeter providing charge status of onboard battery		
DC outlet to power: 12 volt Item Weight: 18 lbs.		
Product Dimensions: 16.3" x 14.1" x 5.1"		
Voltage: 12 volts		
1-year Limited Warranty		
3NN. <u>Booster Jump Set</u> Grey with 25' Cables		
1-year warranty: Free of defects in material and workmanship		
300. Special Paint Colors Not On the Standard Color Chart		
<ol> <li>3PP. <u>Diagnostic Tools / Test Equipment</u></li> <li>Successful bidder shall be required to supply between one (1) and three complete sets of OEM testing/diagnostic/programming equipment (i.e. I software, cabling, and adapters) and special tools required to perform the of diagnostic and maintenance actions necessary to maintain vehicle operations.</li> </ol>	laptop, ne full range erability.	
This equipment will cover the vehicle chassis, engine, transmission, bra hydraulics, and all additional equipment (if applicable)	□ □	
2. All laptop computers will be of the newest available technology and have sufficient storage and memory to operate all required software		
3. Provide a list of all test/diagnostic/programming equipment and special being supplied at the time of bid		
4. All software installations and activations will be completed by the succe bidder at no cost to the County		
<ul><li>5. All software updates and renewal will be provided at no cost to the Coufor a period of five (5) years from the acceptance of the equipment</li><li>6. All technical issues relating to test/diagnostic/programming equipment</li></ul>		
special tools shall be resolved by the successful bidder at no cost to the for a period of five (5) years from the acceptance of the equipment  7. Training shall be provided on all items in this section at a specified		
County location		

<b>COMPL</b>	<b>IANCE</b>
YES	NC

#### **OPTIONS** (Cont'd)

#### 3QQ. Two-Way Radio Power and Wiring Requirements for New Vehicles

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps
- #12 AWG BLACK wire connected to chassis ground

• #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps		
Wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle and secured in the vicinity of the operator Wiring harness shall be clearly labeled "TWO-WAY RADIO". Wires shall be unterminated 12VDC sources shall be protected from making contact with grounded metal surfaces	ed	
<ul> <li>3RR. Installation of County Supplied Two Way Radio and Accessories</li> <li>Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc.</li> <li>For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included: <ul> <li>#12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.</li> <li>#12 AWG BLACK wire connected to chassis ground.</li> <li>#16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.</li> </ul> </li> </ul>	ne	
These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle.  The wiring harness shall be clearly labeled "TWO-WAY RADIO". The 12VDC sources shall be protected from making contact with grounded metal surfaces.		
3SS. <u>Technical Support</u> Technical Support is to be provided by factory authorized technical representatives and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting		
The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification		
<ul> <li>Technical support may be requested in the following areas</li> <li>Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.</li> <li>Transmission – 1 day at each location</li> <li>Electrical – 1 day at each location</li> <li>Brakes – 1 day at each location</li> <li>Hydraulic system (dump body, spreader, snow plow) – 1 day at each location</li> </ul>		
• Upfitter (dump body, sweeper, etc.) – 1 day at each location		

	COMPLIAN YES	NO NO
<u>OPTIONS</u> (Cont'd) 3SS. <u>Technical Support</u> (Cont'd)		
Technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks)		
Shorter training days shall be allowed only with consent of Vehicle Services		
Total training hours shall be provided and no additional compensation will be considered		
Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder		
For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled		
Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper education		
Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:		
<ul> <li>Toms River, 152 Chestnut Street, Toms River, N.J. 08753         (Two (2) sessions will be provided at this location: One beginning at 7 am and another beginning at 1:30 pm)     </li> <li>Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050</li> </ul>		
Successful bidder shall provide Technical Support sessions for other Departments which will be held at an Ocean County location specified by the requesting department		
Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only		
Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service		

	<u>COMPL</u> <u>YES</u>	IANCE NO
CHASSIS SPECIFICATIONS	<u>——</u>	
CURRENT MODEL YEAR, or newer Ford F550 Regular Cab		
Dual Rear Wheels, Four Wheel Drive		
60" Cab to Axle (CA)		
7.3L V8 gasoline engine		
40 gallon fuel tank		
TorqShift transmission with PTO option		
19,000 lb. GVWR		
Cab shall be military grade aluminum alloy for longevity to the County in lieu		
of carbon steel		
Frame to be fully boxed under cab and "C" channel behind cab for easy	_	_
mounting of body		
Oil life monitor, engine hour and engine idle hour meters		
Air Conditioning		
Airbags, frontal driver & passenger, side impact and side air curtains		
TowCommand integrated trailer brake controller, manual telescoping		
trailer tow mirrors		
7 wire trailer wiring harness (no plug)		
AM/FM radio; SYNC Enhanced voice recognition communication and		
entertainment, 911 Assist, AppLink 4-2" LCD Center Screen, One (1) Smart charging USB Port SYNC		
Power windows, locks, mirrors, and heated mirrors		
Center High Mount Stop Lamp 240 amp HD alternator, 12V 750 CCA battery		
•		
Tilt and telescoping steering wheel 4.88 ratio limited slip axle		
4 wheel power ABS brakes, front and rear disc, power steering,		Ш
front and rear stabilizer bars		
Quad-beam jewel-effect halogen headlamps, 5 roof marker lights		
LT225/70R19.5G BSW Traction tires – six (6)		
One (1) full sized spare tire mounted to wheel and one (1) jack		
Chrome front bumper, front tow hooks		
Chrome hub covers, front bumper grill		
Power Sliding Rear glass with defrost – sc/cc only		
Remote Start		
Halogen Fog Lamps		
40/20/40 split vinyl bench seat with center arm rest		
Auxiliary power point, six (6) upfitter switches located overhead center	Ш	
Tachometer, speedometer, oil pressure, transmission temp, engine temp,		
and fuel gauge		
Interval windshield wipers		
Driver & passenger grab handles		

	<u>COMPL</u> <u>YES</u>	<u>IANCE</u> <u>NO</u>
CHASSIS SPECIFICATIONS (CONT'D)		
Standard XL Rear view camera and prep kit		
3-year/36,000 mile bumper-to-bumper warranty on OE components		
5-year/60,000 mile powertrain warranty		
Shift on the fly		
Cab steps, molded black (running boards)		
Snow plow prep package		
Single color to be selected from standard color chart at time of order Undercoating – entire truck chassis, underside of cab and underside of added body (dump, utility, platform) shall be coated with		
Tectyl 2423 Haps Free Black, or Z Guard Product, a low VOC,		
High Solids, Emulsion Corrosion preventing coating		
PLATFORM SPECIFICATIONS		
Platform body shall be a heavy duty body to be used on a single axle chassis		
The hoist shall be an arm type hoist		
The unit shall be a current design and production unit. Bidders shall submit current literature for body, hoist and snow plow proposed		
During the fabrication period of the unit, the County of Ocean reserves the right to make interval inspections, as it deems necessary. If a bidder is submitting an alternate to what is referenced in the specifications, the proposal shall be accompanied by descriptive literature, marked to indicate the exact items to be furnished, electrical and hydraulic diagrams, along with engineering drawing documentation of the same. These specifications are not intended to be restrictive, but are meant to describe the type of unit required for use by the County of Ocean. These specifications address the minimum performance requirements of the Vehicle Services Department; the County will consider alternate products provided that they meet these minimum requirements.		
If a bidder is basing his proposal on equipment other than what is specified and wishes the equipment he proposes to be considered as an "Approved Equivalent," he shall submit, on a separate sheet in the exact format of the specifications contained herein, an item description, including the make, model and manufacturer's name of that which he proposes to substitute. For purposes of comparison, include only those items on each sheet as given in these specifications. Such bidder shall also include, but not as a substitute for the above, manufacturer's literature and specifications. If the bidder does not submit the description or deviations as indicated above, it will be understood that the bidder intends to supply the particular item as designated in the specifications and the County of Ocean		
will so demand. Substitutions will not be permitted after receipt of bid.		Ll

DI ATEODM SDECIEICATIONS (Control)	COMPLL YES	ANCE NO
PLATFORM SPECIFICATIONS (Cont'd) Body upfitter must provide installation of equipment bid		
The platform body shall be of current design and compatible with the specified chassis		
General: Heavy Hauler JR PHHJT-93B Platform Body with Options The platform body shall be a heavy hauler junior style to be used on specified single rear axle chassis. The complete body and removable sides must be supplied by a single manufacturer and be a proven standard production model.		
Dimensions  • 111" Platform Length  • 95.9" Platform Width  • 40" High Permanently Installed Bulkhead with mesh window		
Construction Platform body shall be constructed of ASTM A36 standard with a minimum 36,000 PSI yield for minimal deflection in critical areas		
Continuous weld seams to prevent entrapment of dirt and moisture with superior workmanship		
Bulkhead Permanently installed bulkhead		
E-Track installed height of lower and center rails on stake sides		
Shall include 1 E-Track 2" wide ratchet strap		
Bulkhead shall be constructed from 11 gauge high strength steel		
Bulkhead shall include rust-resistant punched window		
Bulkhead shall be secured to platform with one-piece box section corner post and two (2) 3" structural intermediate posts		
Platform Portion Shall have 3/16" treadplate steel floor; steel over wood overlay is NOT ACCEPTABLE		
Floor and understructure shall be undercoated for corrosion protection		
Side and end rails shall be constructed from 6" structural steel channel		
Sides and end rails shall face outward to accommodate binding straps and chains		
Recessed heavy duty D-rings every 3 feet, on both sides of floor (street and curbside)		

PLATFORM SPECIFICATIONS (CONT'D)	<u>COMPL</u> <u>YES</u>	IANCE NO
Platform Substructure Long sills shall be constructed with 5" structural steel		
Cross sills shall be constructed with 5.44" structural steel on 16" centers		
Lighting LED lighting shall meet all FMVSS standards		
The wiring harness shall be encased in a plastic loom and all wires shall be colored for ease of troubleshooting		
The wire harness must have connectors that make it compatible to the specified chassis without splicing		
The stop/tail/turn lights shall be mounted below the platform in non-corrosive containers		
Accessories Sleeve Adapter HC3Z-19H282-A		
<ul> <li>Pintle Plate <sup>3</sup>/<sub>4</sub>" thick with:</li> <li>Class V Receiver Hitch</li> <li>Pollak 7 pole RV style harness twist and lock plug, with weather pack back, Part #'s 11-998 (harness) and 11-916P (7 way plug)</li> <li>Back up alarm 102 dB</li> <li>3-ball receiver tube 1 7/8", 2", 2 5/16" locking hitch pin</li> <li>6 ton receiver mount Pintle &amp; 2" ball combination hitch (Note: Not available when hoist and liftgate ordered together)</li> </ul>		
Two (2) pull-out ladders mounted behind the cab		
Grab handle mounted to work in conjunction with ladders		
Stone shields and plain black mud flaps  Conspicuity enhancement – 2" red and white diamond grade reflective striping		
DOT safety kit, first aid kit, and 10 lb. fire extinguisher w/bracket and safety triangles		
Atomic LED lights, amber, to be wired to one of the upfitter switches provided in the chassis		
OPTIONS 4A. <u>Upgrade chassis to Super Cab chassis, retaining 60" Cab to Axle</u>		

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 4B. <u>Upgrade chassis to Crew Cab chassis, retaining 60" Cab to Axle</u>		
4C. Upgrade to Regular Cab chassis with 84" Cab to Axle		
4D. <u>Upgrade to Super Cab chassis with 84" Cab to Axle</u>		
4E. Upgrade to Crew Cab chassis with 84" Cab to Axle		
4F. Upgrade to Regular Cab chassis with 108" Cab to Axle		
<b>4G.</b> <u>Upgrade to 12'3" Platform Body with Removable Stake for use with 84" CA</u> Upgrade specified platform body to Heavy Hauler PHHT-124B Platform Body with Removable Stake, for use with 84" CA chassis application. The complete body and removable sides must be supplied by a single manufacturer and be a proven standard production model.	<u>Chassis</u>	
<b>Dimensions</b> 147" Platform Length		
95.9" Platform Height		
40" High Permanently Installed Bulkhead with mesh window		
40" High Removable Stake Sides		
40" High Rear Swing Gates		
<b>4H.</b> Thieman TT Liftgate Thieman Model TT 20ET or equal liftgate, to be used on non-dumping platforms		
Steel Platform: 86" x 30" + 5"		
Ramp is 5" fixed		
Capacity: 2,000 lbs.		
Rustproofing on platform frame		
Operation: Power down, level ride		
Lift Mechanism: Direct dual cylinder lift (no chains or cables)		
Pivot Pins: Non-rotating stress proof materials with Nitrotec		
Controls: Molded toggle switch control		

OPTIONS (C424)	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 4H. Thieman TT Liftgate (Cont'd) Bushings: Low maintenance replaceable bushings at all pivot points		
Platform Surface: Steel skid resistant safety plate		
Lift Cylinders: Dual cylinders 2" bore x 8" stroke, adjustable shaft for platform height adjustment		
Power Unit: Electric hydraulic, 12 volt DC motor, enclosed		
Electrical: Shall meet all TMC electrical requirements; includes 150 amp circuit breaker		
Safety Latches: Dual automatic locking pins lock platform in stored position		
Bed Height Range: 30" loaded to 50" empty		
Installed Weight: 775 lbs.		
Accessories: In-Cab Shut Off Switch and Light Kit		
Extra fabrication for the hitch shall be included		
Note: with this liftgate option you lose rear gates.		
4I. <u>Thieman Stow-Away Standard Tailgate Liftgate</u> Thieman Model M20ET8436 or equal, to be used with non-dumping platforms with at least 84" CA, 36" of rear overhang, and 12'3" body		
Steel Platform: 84" x 36" + 6"		
Capacity: 2,000 lbs.		
Operation: Power Up and Power Down; Molded toggle switch controls		
Lift Cylinder: 3" bore x 10" stroke, adjustable shaft for platform height		
Pivot Pins: Non-rotating stress proof material with Nitrotec		
Bushings: Low maintenance replaceable bushings at all pivot points		
Snubber: Kit reduces movement during travel		
Power Unit: Electric hydraulic, 12 volt DC motor with solenoid cover		

	COMPLIAN YES	NO NO
OPTIONS (Cont'd) 4I. <u>Thieman Stow-Away Standard Tailgate Liftgate</u> (Cont'd)		
Travel Position: Platform stores under truck body at rear of vehicle		
Accessories with Platform: Dock Bumpers, Receiver Hitch Bracket, Rear Impact Guard		
<b>4J.</b> <u>Under Body Hoist for Dumping Capabilities</u> Rugby SR-5020 truck hoist, or equal, tested at full-rated capacity for an extended life cycle	П	
Class 50 Dump Hoist Approximate Weight: 710 lbs.		Ш
10' Subframe		
Double acting hydraulic pump		
Cylinder Specifications: 6" bore, 20" stroke, 2 1/2" diameter rod		
Mounting Height: 11.3"		
Capacity: 9.1-17 tons		
Factory tested for durability and performance		
Integrated Body Prop		
Mounting Distance: 90.25"		
<b>Hydraulics</b> : Direct mount PTO and Pump. PTO must be a Chelsea 210 with direct mount pump and 9 gallon reservoir providing up to 4 gallons per minute.		
Shall be operated by a rocker switch mounted in the dash		
<b>4K.</b> <u>Dump-Through Liftgate</u> Must be selected with Hoist Option if Gate Required  Anthony Liftgates Model #AR-DT 1800 dump-through liftgate		
Durable roller chain drive		
Marine duty potted toggle switch		
Pressure compensated flow valve		
Circuit protection		
Level ride platform		

	COMPLIAN YES	NO NO
OPTIONS (Cont'd) 4K. <u>Dump-Through Liftgate</u> (Cont'd)		
3-step powder coat		
2-year mechanical and 2-year electrical and hydraulic parts and labor warranty		
90" platform width		
Cab cut off switch		
Replaces swing gates or barn doors		
4L. 40" Stake Sides (9'3" Body) 40" High Removable Stake Sides to fit base unit's 9'3" body		
Reinforced, E-Track to be installed on lower and center rails of stake sides		
Three (3) sets of E-Track 2" ratchet straps provided with sides		
40" High Rear Swing Gates Color: Black		
4M. <u>40" Stake Sides (12'3" Body)</u> Same specifications as option 4L, but for longer 12'3" body option		
4N. <u>Color Option for 40" Stake Sides</u> Option to paint 40" stake sides any color different from standard black		
NOTE: Bidder MUST submit ONE price. Same price to be used for both body lengths		
40. <u>52" Stake Sides (9'3" Body)</u> 52" High Removable Stake Sides to fit base unit's 9'3" body		
Reinforced, E-Track to be installed on lower and center rails of stake sides		
Three (3) sets of E-Track 2" ratchet straps provided with sides		
52" High Rear Swing Gates Upgrade bulkhead to 52"		
Color: Black		
4P. <u>52" Stake Sides (12'3" Body)</u> Same specifications as option 4O, but for longer 12'3" body option		
4Q. <u>Color Option for 52" Stake Sides</u> Option to paint 52" stake sides any color different from standard black		
NOTE: Bidder MUST submit ONE price. Same price to be used for both body lengths		

	COMPLIAN	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
4R. <u>40" Grain Sides (9'3" Body)</u> 40" High one-piece 14 gauge sides with stakes that adapt to specified body		
40" High barn doors, double opening		
2 bars that fit across the body to stop the spreading of the sides		
Color: Black		
4S. <u>40" Grain Sides (12'3" Body)</u> Same specifications as option 4R, but for longer 12'3" body option		
4T. <u>Color Option for 40" Grain Sides</u> Option to paint 40" grain sides any color different from standard black		
NOTE: Bidder MUST submit ONE price. Same price to be used for both body lengths		
4U. <u>52" Grain Sides (9'3" Body)</u> 52" High one-piece 14 gauge sides with stakes that adapt to specified body		
52" High barn doors, double opening		
2 bars that fit across the body to stop the spreading of the sides		
Upgrade bulkhead to 52"		
Color: Black		
<b>4V.</b> 52" Grain Sides (12'3" Body) Same specifications as option 4U, but for longer 12'3" body option		
<b>4W.</b> Color Option for 52" Grain Sides Option to paint 52" grain sides any color different from standard black		
NOTE: Bidder MUST submit ONE price. Same price to be used for both body lengths		
<b>4X.</b> <u>Light Package 1</u> Whelen LED Lights (Colors to be indicated at time of order); or equal		
Body upfitter must provide installation of lights so they work in conjunction with the equipment on truck:  • Four (4) Micron Series Super LED in grill  • Four (4) 4" ovals on body sides, two (2) each side angled out for oncoming traffic in tissue boxes		
• Two (2) Micron Series at rear of body		

	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
<ul> <li>4Y. Light Package 2 Requires stake or grain sides and dump-through liftgate</li> <li>Whelen LED Lights (Colors to be indicated at time of order), or equal</li> <li>Body upfitter must provide installation of lights so they work in conjunction with the equipment on truck:</li> <li>Four (4) Micron Series Super LED in grille</li> <li>Four (4) 4" ovals on body sides, two (2) each side angled out for oncoming traffic in tissue boxes</li> </ul>		
• Four (4) rear of body - micron seriesto work in conjunction with liftgate		
<b>4Z.</b> Go Light Work Lights, Model 30004ST Two (2) Go Light Stryker Work Lights		
Permanently mounted on bulkhead		
6000 maximum lumens		
5 amp draw		
9-32 VDC input		
Mounted to telescopic poles		
4AA. I-Pack Tool Box Knapheide I-Pack Tool Box mounted between cab and body		
Painted to specified color at time of order, base coat and clear coat		
Stainless steel continuous hinges, NO EXCEPTION		
14 gauge Galvaneal shell, E-coat primer, and latches with ABS pans for superior corrosion resistance		
<b>4BB.</b> <u>30" Under Body Tool Box</u> Weatherguard Tread Plate Aluminum 631-0-02		
30 1/8" x 18" x 18"		
5.4 cubic feet		
Door opening: 13 ½" high and 25 ¼" wide		
Stainless steel D-handles		
4CC. <u>48" Under Body Tool Box</u> Weatherguard Defender Series 300501-9-01, or equal		

OPTIONS (Cont.d)	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 4CC. <u>48" Under Body Tool Box</u> (Cont'd)		
48" x 19" x 19"		
9.5 cubic feet		
Lock System – Push Button		
Material: Aluminum		
4DD. <u>Air Compressor, 70 CFM</u> VMAC VR70 Underhood Rotary Screw Compressor		
70 CFM, 175 PSI		
3 gallon receiver tank		
Control panel		
Throttle control		
Filter/Regulator/Lubricator		
Relief/Shut-Off valves with all required fittings		
Hose Reel: 50' of ½" I.D. airline mounted under body (unless specified otherwise at time of order)		
<b>4EE.</b> <u>Air Compressor, 150 CFM</u> VMAC VR150 Underhood Rotary Screw Compressor		
150 CFM, 175 PSI		
3 gallon receiver tank		
Control panel		
Throttle control		
Filter/Regulator/Lubricator		
Relief/Shut-Off valves with all required fittings		
Hose Reel: 50' of ½" I.D. airline mounted under body (unless specified otherwise at time of order)		

	COMPLIAN	
OPTIONS (Cont'd) 4FF. Whelen LED 54" Light Bar	<u>YES</u>	<u>NO</u>
Light Bar LED 54", all modules filled with amber LED OR Red and Blue Modules in lieu of amber lights for Sheriff's Department or OEM (to be indicated at time of order)		
Rear traffic advisor with flashing capabilities		
Alley lights and takedowns are to be white		
Twelve (12) scan lock flash patterns		
Controller		
Brackets for mounting on safety back rack or bulkhead of platform		
4GG. 9' Readily Detachable Western Snow Plow System		
<b>Blade Assembly</b> Moldboard– 12 gauge (0.104") steel sheet formed to a 17.3" radius with a 1.76" diameter top curl		
Ribs – Eight (8), 0.25" thick, variable profile, electrically welded to sheet, torsion tube and 0.25" thick, high strength steel base channel		
Torsion Tube $-2$ " diameter, full width, electrically welded to all eight ribs		
Cutting Edge – Reversible 0.5" x 6" high carbon steel C1080 attached with ten (10) 0.63" Grade 5 carriage bolts		
Disc Shoes – Two (2), full rotation, height adjustable, Austempered Ductile Iron shoes with integral 1" diameter shaft secured to blade with lynch pins		
Shoe brackets shall be welded to vertical ribs Blade $Trip - 50^{\circ}$ full blade $trip$		
Trip Springs – Four (4), 2.38" OD x 0.39" diameter, C1060, hard drawn, stress relieved wire, preloaded, with 0.63" x 4" eyebolts		
Shock Absorbers – Two (2), 5" stroke, shielded shock absorbers to retard extension velocity and dampen blade trip return		
Blade Trip Pivot – Three (3) 0.75" diameter steel pins		
Blade Guides – Two (2) highly visible, vinyl coated, spring wound, with replaceable flags		
Plow Angling – 30° right and left		
<b>A-Frame</b> Electrically welded, reinforced, 3" x 3" x 0.19" wall structural steel side tubes with 0.50" thick, formed nose plate and integral attachments for angling rams to receive 1" diameter pins	П	П

	<u>COMPL</u> YES	IANCE NO
OPTIONS (Cont'd)  4CC O' Pandily Datashable Western Snew Play System (Cont'd)		
4GG. <u>9' Readily Detachable Western Snow Plow System</u> (Cont'd) A-Frame (Cont'd)		
Lift Chains – Two (2), 0.25" Grade 43 high test steel with 2,600 lb. working load limit, attached with 0.38" U-bolts		
Quadrant		
Electrically welded, reinforced, 5" OD x 0.25" wall structural steel tube with 0.50" thick nose plates and integral attachments for angling		
rams to receive 1" diameter pins		
A-Frame to Quadrant Angle Pivot – 1" diameter Grade 5 bolt		
Lift Frame		
Lift frame to have provision for attachment of out front hydraulics and light kit Lift Arm $-0.25$ " x 2" formed bar welded with a 7 gauge steel cover		
Two Plow Stands – Self-storing and adjustable integrated into the plow attachment Mechanism		
Connecting hook and lever with integral with a 0.50" lock pin		
Lift Frame – Two piece lift frame with tubular construction		
Lower lift frame to include drive in plow alignment horns		
Mount		
Custom designed, electrically welded, structural steel mounting readily adaptable to truck frame		
Attached to truck with Grade 5 fasteners		
Vehicle, with mount attached, shall meet Federal Motor Vehicle Safety Standards		
by compliance or by vehicle manufacturing approval		Ш
Removable receiver brackets for additional ground clearance		
Paint		
Plow blade shall be made of shot blasted steel and cleaned with phosphate solutions and have baked-on red polyester powder coating		
A-Frame, Quadrant and Lift Frame – shall be made of shot blasted steel		
and cleaned with phosphate solution and have baked-on black powder coating		
Hydraulics Electric solenoid activated and detachable with lift		

	COMPL	
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
4GG. <u>9' Readily Detachable Western Snow Plow System</u> (Cont'd) Hydraulics (Cont'd)		
Front mounted hydraulic unit consisting of a fixed displacement gear pump with 1750 PSI system relief, direct tang driven by a 4 ½" 12 volt DC motor		
Pump with filter screen shall be immersed in a steel deep drawn reservoir		
Main valve manifold shall contain three (3) side mounted and covered solenoid cartridge valves		
Secondary valve shall contain two (2) driver side and one (1) curb side mounted and covered solenoid cartridge valves		
Cushion relief valves set at 4,000 PSI and a quill adjustment screw to adjust blade drop speed		
One (1) - $1\frac{1}{2}$ " x 8" lift ram and two (2) $1\frac{1}{2}$ " x 12" angling rams each with a rod seal, a wiper ring and a gland nut		
Hydraulic hoses shall be 1/4" steel braided SAE 100R1		
Hydraulic unit shall be controlled by a soft touch, hand held in-cab control		
Control shall be equipped with an on/off and mode buttons and indicator lights		
Control can be dash mounted		
In-cab control shall be connected to valve manifold and to the motor through an auxiliary 12-volt multiplexed harness		
Power and control harness to have quick disconnects and covers at the grille		
Control shall allow plow to be in float when lowered and also be able to angle left or right when in float		
Unit shall be a "low side" drive system, which provides positive potential continuously with a switched ground to control the solenoids		
Unit shall possess programmable security lockout feature		
Unit shall possess programmable hydraulic soft stop feature		
Unit shall possess programmable one touch float feature		

(			COMPLIANCE
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>	
4GG. 9' Readily Detachable Western Snow Plow System (Cont'd)			
Hydraulics (Cont'd)			
Hydraulic fluid shall be MIL5606 equivalent standard transmission fluid (ATF) or aircraft hydraulic oil for low-temperature operation			
Cycle times: Lift, 2.0 seconds; Angle, 5.0 seconds			
Hydraulic unit shall stay with plow when plow is disconnected from truck			
Lights Night Hawk LED Plow Lights			
Headlights			
Comprised entirely of light emitting diodes using solid optic elements for low beam and high beam lights			
A reflected LED light for the side lighting using			
EdgeView Technology			
DRL/Park lights using white lights behind a frosted filter, turn signal utilizing amber lights behind the same frosted filter			
Plow Removal Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be easily removed in one step from truck as one complete unit			
Accessories with Plow  • Snow deflector  • Curb guard right and left			
Cab command Hand Held Joystick			
<ul> <li>4HH. Trailblazer 325 Air Pak</li> <li>Model 907549003, or equal</li> <li>Battery Charge/Crank Assist with 25' Battery charge/jump cable Part #300422</li> <li>Independent Weld and Generator</li> <li>Industrial Rotary Screw Air Compressor</li> <li>Air Cooler Separator</li> <li>RTI Filter</li> <li>Desiccant Air Dryer</li> <li>Protective Cover</li> </ul>			
<ul><li>Protective Cover</li><li>Wireless Remote Hand Control</li></ul>			
4II. Road Department Paint Color Scheme School Bus Yellow from the bottom of the windows down	П	П	

	COMPLIA YES	NCE NO
OPTIONS (Cont'd)  All Pand Department Point Color Schome (Cont'd)		
4II. Road Department Paint Color Scheme (Cont'd) Academy Blue #5240 from the bottom of the windows up to and including cab roof and back		
On hood from bottom of windshield to a point on the hood to make a "V" and match the road department fleet		
Shall be base coat clear coat (Note: Not all Vehicles will be painted this way)		
4JJ. <u>Slide Bar with Straps</u> 3' slide bar with three (3) 3" ratchet straps mounted under body ratchet bar included		
<b>4KK.</b> Stainless Steel V-Box, Hydraulically Operated Hydraulics  PTO must be a Chelsea 210 with direct mount pump and 14 gallon reservoir providing up to 9 gallons per at 1000 rpm, must be a modular manifold cartridge type valve with five (5) year warranty		
Shall be operated by the chassis provided upfitter switches		
General: Self-Contained compact material spreader with a capacity of 3.0 cubic yards suitable for mounting on specified truck		
<ul> <li>Dimensions:</li> <li>Outside Hopper Length 9 feet</li> <li>Outside Hopper Width 50 feet</li> <li>Overall Spreader Length 130 inches</li> <li>Overall Spreader Height 71 inches with long chute or 59 inches with short chute</li> <li>Capacity 3.0 cubic yards</li> <li>Weight 645 lbs</li> </ul>		
Hopper Construction: Shall be wrap around and spot welded inside and out		
Shall have 16 gauge sides and 16 gauge ends, with the slope closest to the sill at 45° and a bend half way up that adds an additional 13° for a total of 58° from horizontal at the top		
Four lift point on each corner for easy handling Three 16 gauge vertical supports on each side		
Full-length chain guards shall be 14 gauge steel and welded in place		
Floor shall be 14 gauge steel. The shell is to be comprised of 201 Stainless Steel		

		IANCE
OPTIONS (Cont'd)	<u>YES</u>	<u>NO</u>
4KK. Stainless Steel V-Box, Hydraulically Operated Hydraulics (Cont'd)		
Conveyor: Shall be drag bar chain type		
Overall shall be 100% constructed of 14 gauge 201 stainless steel with a 16 3/4" wide pintle chain conveyor system		
Steel pintle chain with 3/16" x 3/4" cross bars		
Chain strength is 11,000 lbs. per strand; 22,000 lbs. total		
Idler and drive sprockets shall be 6 tooth cast iron on 1 1/8" shafts		
The sprockets and idler shaft are to be plated to inhibit corrosion The chain shall have 3 ½" adjustment range		
Conveyor Drive/Engine: The dual hydraulic motors shall generate 8.75 HP when supplied with 10 gpm @ 1500 PSI		
It shall be 2.8 CIR "H" series Char Lynn or equivalent hydraulic gerotor type with ½" npt port, SAE 2B 2-bolt mounting flange and 1" diameter output shaft with .406 diameter cross hole		
The pressure rating shall be 2400 PSI max intermittent and 1800 PSI continuous		
The flow rating shall be 14 GPM max intermittent and 12 GPM continuous		
Drive shaft shall have heavy-duty, sealed, self-aligning ball bearing, equipped with grease fitting		
The idler shaft shall have self-aligning 1 1/8" diameter, 2 bolt flange, ball bearings		
Conveyor gear case housing shall be cast iron		
Gear shall be aluminum bronze		
Worm gear shall be hardened steel and ground		
Ratio shall be 20:1 with one inch input shaft and 1 1/8" output shaft on tapered roller bearings		
Input shaft of gear case to be drive by a chain belt from engine		

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 4KK. <u>Stainless Steel V-Box, Hydraulically Operated Hydraulics</u> (Cont'd)		
Chute Assembly: Spinner disk shall be polyurethane, 15.5 inches in diameter, and with four fins		
The spinner disk is attached to a 1" diameter plated shaft driven by a pulley and belt from the gear case input shaft		
Material is guided from the conveyor to the spinner disk through an enclosed 14 gauge chute housing		
Two internal baffles and a stainless steel circular deflector housing enclosing a stainless steel adjustable circular deflector give complete control of spread direction		
Width of spread up to 40'		
Circular deflector housing protects truck bumper and under parts		
The chute shall be fastened with two pins on a hinged housing		
Feed Gate: Shall be lever operated, friction lock with sight gauge for accurate adjustment		
Standard Features: Stainless steel hardware throughout		
Shall include heavy-duty top screen constructed from 1/4" diameter rod, Inverted Vee, Hold down kit		
Accessories: Spreader Light		
Rear Stainless steel light bar: stop/tail/turn/reverse with amber strobes 6" extension kit		
Chain and turnbuckle tie downs		
EZ Spread Controller: The spreader controls shall be capable of operating a granular spreader with auger/conveyor, spinner and pre-wet (or anti-ice) output channels		
Each function can be operated individually or all simultaneously		
In-cab controller must be an automotive grade product		
Amusement or gaming products will <b>not be accepted</b>		

	<u>COMPL</u> <u>YES</u>	IANCE NO
OPTIONS (Cont'd) 4KK. <u>Stainless Steel V-Box, Hydraulically Operated Hydraulics</u> (Cont'd) EZ Spread Controller: (Cont'd)		
The liquid channel can operate an electric or hydraulic pre-wet system		
Controller shall also have an optional dash mount, stand-alone, or console mounting options		
The user shall have the ability to adjust the speed of each function and the amount of granular material or liquid with the soft touch key pad		
The printed PVC soft touch membrane switch interface shall be tested to 5 million impressions for long life and durability		
Touch pad to control granular feed rate or spinner speed		
All set-up and programming shall be completed using the controller soft key pad with no programming keyboard		
Controller shall have the ability to connect the feed rate and spinner function for single stroke simultaneous start up		
Controller must offer a "Spot Blast" feature		
Spot Blast will activate the Blast with a single keystroke when the controller is paused		
Adjustable valve unseat mode must be a standard feature		
The spinner shall increase during Blast; must also be an adjustable option		
The spreader control shall be capable of operating each function in open loop Mode		
Spreader must be field configurable to operate either: Ground Speed Oriented or No Ground Speed (simple manual operation) with a single switch setting		
Controller shall also offer a settable		
Blast Feature that will function during Ground		
Speed Triggered Operation		
The controller must include integrated protection and diagnosis systems with safety features incorporated into the system		

	<u>COMPI</u> <u>YES</u>	LIANCE NO
OPTIONS (Cont'd)		
4KK. <u>Stainless Steel V-Box, Hydraulically Operated Hydraulics</u> (Cont'd) EZ Spread Controller: (Cont'd)		
Power Safe Wiring Design: For safety reasons, grounding or cutting any		
wire at any point between any valve coil and the controller must not cause		
any valve to actuate		
One lead from each hydraulic valve coil must be wired to a common ground		
point System shall be capable of self-diagnosis using the pause indicator LED light		
All connections inside the hydraulic valve/electronic control junction box must		
be IP68 rated		
All connectors shall be rated as "6x" – dust proof		
All connectors shart be fated as $- \cos proof$		
All connectors shall be rated as "x8" – protected against the effects of		
permanent submersion in water as well as showing no corrosion after 500 hours in a		
35°C salt spray		
System operating temperature range -20 to +40°C		
All connections shall be labeled with appropriate descriptions for each connection		
to individual solenoids of the hydraulic actuating cylinders		
Controller shall have a five (5) year warranty		Ц
4LL. <u>Diagnostic Tools / Test Equipment</u>		
1. Successful bidder shall be required to supply between one (1) and three (3)		
complete sets of OEM testing/diagnostic/programming equipment (i.e. laptop,		
software, cabling, and adapters) and special tools required to perform the full of diagnostic and maintenance actions necessary to maintain vehicle operabili		
This equipment will cover the vehicle chassis, engine, transmission, brakes,	ty.	
hydraulics, and all additional equipment (if applicable)	П	
2. All laptop computers will be of the newest available technology and have suff	ricient	
storage and memory to operate all required software		
3. Provide a list of all test/diagnostic/programming equipment and special tools		
being supplied at the time of bid		
4. All software installations and activations will be completed by the successful		
bidder at no cost to the County		
5. All software updates and renewal will be provided at no cost to the County	_	_
for a period of five (5) years from the acceptance of the equipment		
6. All technical issues relating to test/diagnostic/programming equipment and		
special tools shall be resolved by the successful bidder at no cost to the Count	y	
for a period of five (5) years from the acceptance of the equipment 7. Training shall be provided on all items in this section at a specified County		
Location		П
	_	_

**COMPLIANCE YES** NO

#### **OPTIONS (Cont'd)**

#### 4MM. Two-Way Radio Power and Wiring Requirements for New Vehicles

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps

Upfitter (dump body, sweeper, etc.) -1 day at each location

<ul> <li>#12 AWG BLACK wire connected to chassis ground</li> <li>#16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amp</li> </ul>	os	
Wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle and secured in the vicinity of the operator.  Wiring harness shall be clearly labeled "TWO-WAY RADIO". Wires shall be untermin 12VDC sources shall be protected from making contact with grounded metal surfaces		
4NN. <u>Installation of County Supplied Two Way Radio and Accessories</u> Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment following power and wiring components shall be included:	t, the	
<ul> <li>#12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.</li> <li>#12 AWG BLACK wire connected to chassis ground.</li> <li>#16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amp</li> </ul>	os.	
These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle.  The wiring harness shall be clearly labeled "TWO-WAY RADIO".  The 12VDC sources shall be protected from making contact with grounded metal surfaces.		
400. <u>Technical Support</u> Technical Support is to be provided by factory authorized technical representatives and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting		
The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification		
<ul> <li>Technical support may be requested in the following areas</li> <li>Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.</li> <li>Transmission – 1 day at each location</li> <li>Electrical – 1 day at each location</li> <li>Brakes – 1 day at each location</li> <li>Hydraulic system (dump body, spreader, snow plow) – 1 day at each location</li> </ul>		

	COMPLIAN YES	NCE NO
OPTIONS (Cont'd)		
<b>400.</b> Technical Support (Cont'd) Technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks)		
Shorter training days shall be allowed only with consent of Vehicle Services		
Total training hours shall be provided and no additional compensation will be considered		
Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder		
For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled		
Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper education		
Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:		
• Toms River, 152 Chestnut Street, Toms River, N.J. 08753 (Two (2) sessions will be provided at this location: One beginning at 7 am and another beginning at 1:30 pm)		
<ul> <li>Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050</li> </ul>		
Successful bidder shall provide Technical Support sessions for other Departments which will be held at an Ocean County location specified by the requesting Department		
Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only		
Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service		

CHA COLO ONE CHELCA THONG	COMPLIA YES	NCE NO
CHASSIS SPECIFICATIONS  Comment Model Vega on a cover Food F550 Recorder Cale swith Steel Dogge Reduc		
Current Model Year, or newer Ford F550 Regular Cab with Steel Dump Body Dual Rear Wheels, Four Wheel Drive		
,		
84" Cab to Axle (CA)		
7.3L V8 gasoline engine		
40 gallon fuel tank		
TorqShift transmission with PTO option 19,000 lb. GVWR Cab shall be military grade aluminum alloy for longevity to the County		
in lieu of carbon steel		
Frame shall be fully boxed under cab and "C" channel behind cab		
Oil life monitor, engine hour and engine idle hour meters		
Air Conditioning		
Airbags, frontal driver & passenger, side impact and side air curtains TowCommand integrated trailer brake controller, manual telescoping trailer tow		
mirrors		
7 wire trailer wiring harness (no plug) AM/FM radio, SYNC4 Enhanced voice recognition communication and entertainment,		
911 Assist, AppLink 4-2" LCD Center Screen, One (1) Smart charging USB Port		
Power windows, locks, mirrors, and heated mirrors		
Center High Mount Stop Lamp		
240 amp HD alternator, 12V 750 CCA battery		
Tilt and telescoping steering wheel		
4.88 ratio limited slip axle		
4 wheel power ABS brakes, front and rear disc, power steering, front and		
rear stabilizer bars		
Quad-beam jewel-effect halogen headlamps, five (5) roof marker lights		
LT225/70R19.5G BSW Traction tires – six (6)		
One (1) full sized spare tire mounted to wheel and one (1) jack		
Chrome front bumper, front tow hooks		
Chrome hub covers, front bumper grill		
Power Sliding Rear glass with defrost – sc/cc only		
Remote Start		
Halogen Fog Lamps		
40/20/40 split vinyl bench seat with center arm rest		
Auxiliary power point, six (6) upfitter switches located overhead center		
Tachometer, speedometer, oil pressure, transmission temp, engine temp,		
and fuel gauge		
Interval windshield wipers		
Driver & passenger grab handles		
Standard XL Rear view camera and prep kit		

	YES YES	NCE NO
CHASSIS SPECIFICATIONS (CONT'D)		
3-year/36,000 mile bumper-to-bumper warranty on OE components		
5-year/60,000 mile powertrain warranty		
Shift on the fly		
Cab steps, molded black (running boards)		
Snow plow prep package		
Single color to be selected from standard color chart at time of order Undercoating – entire truck chassis, underside of cab and underside of added body (dump, utility, platform) shall be coated with Tectyl 2423 Haps Free Black, or Z Guard Product, a low VOC, High Solids,		
Emulsion Corrosion preventing coating		
<b>SWITCH-N-GO SPECIFICATIONS</b> This specification is for a detachable truck body system for vehicles with a GVWR less than 26,000 lbs. This system shall be run off a clutch pump hydraulic system for hoist and winch; electric is <b>NOT ACCEPTABLE</b> .		
For emergency purposes, the body-upfitter must have a facility in New Jersey for parts and service.		
GENERAL Switch-N-Go 11' Hydraulic Hoist System. Model 11-4016-ISH-I0T GEN II 15,000 lbs. Winch Loading Capacity Hydraulic Winch & Hydraulic Hoist. Unlimited Winch Pulls per Day.		
Hydraulic Pump Type:		
- Live Drive Style PTO'for operation while in gear		
Hydraulic Pump Specifications:		
- 3000 PSI@, 12-15 GM.		
Hose Size:		
- 1/2" Diameter Pressure Line, 3/4" Diameter Return Line.		
The Hoist system must have a top frame with Steel wear strips.		
Hoist system must use glass impregnated slide pads when loading/unloading the bodies. Polystone M (UHMW-PE) MPG glass filled material to be used.		
Hoist system rear pivot pin size diameter needs to be a minimum of 1.5".		
Hoist system hinge assembly to be designed and constructed of geometrically optimized $3/8$ " and $\frac{1}{2}$ " thick plate - specifically for loading and removal of interchangeable bodies.		

		<b>COMPLIANCE</b>	
CIENTED AT (Co. 42.1)	<b>YES</b>	<u>NO</u>	
GENERAL (Cont'd) Hoist system rear Body Hold Downs to be "Universal Style" to accept multiple body lengths.			
Hoist system winch is required to have a clutch block-out for safety.			
Prop Rod to be mounted within the hoist frame.			
Swivel Hook for the winch cable.			
Approx. Dumping Capacity 10.3 Ton			
Pre-Plumbed Hydraulic Lines			
Pre-installed In-line Filter Housing with Reusable Filter			
Hydraulic Reservoir: - 15 Gallon minimum with filter Standard 18" Rear Overhang			
Hoist System Install Kit:  9' 12' Gen II H-Series.  Gen II Series Mounting Bracket  Bolt-On Bumper with Light Bars Includes Bumper Face Plate, Light Tubes, Two Lights Per Side,  Stop/Tail/Turn/Reverse and Stop/Tail/Turn/Reverse/Strobe, Wire Harness and  Mounting Hardware.  Rated for 20K  Bolt-on 10 TON 2-1/2" Receiver Tube Weldment and 9/16" hardware  One pair of plastic fenders for 19.5 tires, with mounting brackets  No Advertisement on mudflaps  SNG Fuel Filler Rod			
<b>Hydraulics:</b> PTO must be a Chelsea 210H with direct mount pump and 14 gallon reservoir providing up to 9 gallons per minute at 1000 rpm, must be a modular manifold cartridge type valve with 5 year warranty. Switch N Go shall be operated by the Switch N Go Pendant Controller.			

	COMPLIANCE	
GENERAL (Cont'd)	<u>YES</u>	<u>NO</u>
Lights/Wiring:		
All lamps/reflectors exceed FMVSS 108 requirements.		
Lamps shall be LED flush mounted in shock resistant rubber grommets to maximize	_	_
bulb life.		
Each side of 90" ICC bumper shall include a rear facing auxiliary stop/turn/reverse		
lamp LED for improved visibility and operator's safety. Also includes Amber strobe		
in bumper. The ICC bumper plate will also include a class V receiver tube with D-Rings	S	
back up alarm and trailer plug. The light extensions of the ICC bumper shall be a		
minimum of 16" off the ground. Color-coded wire harnesses are provided to minimize		
installation time and simplify diagnosis.		
Body up light in cab.		
Hydraulic Winch:		
Rated pulling force 15,000 lbs., 6.0 cubic inch motor		
Drum barrel diameter 4"		
Drum flange 8.24"		
Distance between flanges 9.95"		
Recommended maximum wire rope diameter ½"		
Recommended minimum wire rope breaking strength 26,600 lbs.		
Duty cycle 932'		
Maximum layers of wire rope: 3		
Hardened steel two stage planetary gear train with 36:1 reduction provides		
fast line speed		
Heavy duty disc brake for dependable operation and plenty of holding power		
Meets SAE J706 and CE standards		
Winch to be operated off truck hydraulics and Switch N Go controls		
Accessory Lighting:		
Atomic LED marker lights		
3 Whelen Ion T-Series Amber LED evenly spaced on top of pintle plate below		
hoist		
LED spreader light mounted to frame for visibility during spreader operation		
ICC Pintle Plate Bumper as described above:		
<ul> <li>Pollak 7 Pole RV Style harness and twist and lock plug</li> </ul>		
Backup alarm		
• 3 ball receiver tube 1-7/8", 2", 2-5/16" lock in style pin not acceptable	_	_
• 6 ton receiver mount Pintle & 2" ball combination hitch	Ш	Ш
Stop/Tail/Turn/Reverse/Safety Amber light extensions to be a minimum of		
16" from the ground all lights to be LED		$\sqcup$

Plow Angling- 30 degrees right and left.

	COMPLIAN	
CENEDAL (Contid)	<u>YES</u>	<u>NO</u>
GENERAL (Cont'd) Conspicuity Enhancement/Safety:		
2" red and white diamond grade reflective striping,		
DOT Safety Kit, first aid kit, 5 1b fire extinguisher with bracket and safety		
Triangles		
Additional Winch Cable to be supplied at time of delivery		
Additional Safety Locking Pin to be supplied at time of delivery		
Ziebart Undercoating, chassis frame and Switch N Go frame from cab to end of	<del></del>	_
frame rails		
OPTIONS:		
<b>NOTE:</b> Successful bidder must be able to provide <b>any/all</b> options as specified below included this body onto <b>existing County-owned Switch N Go truck</b> . If options are purchased for a Switch N Go Trucks, the equipment shall be delivered to upfitter's facility for final measure installation at time of Mandatory Pre-Build. Bidder must have provided this type of convaint minimum of 5 years of working with the Switch N Go product, proof of this type of workind.	current County- urements and versions in the p	Owned  oast with
5A. <u>9.0' Readily Detachable Snowplow System</u> This option can be selected with all configurations. Can be purchased for existing F-350 pickup trucks thru F-550 with snow plow prep packages.		
Blade Assembly:		
Moldboard - 12 ga. (0.104") steel sheet formed to a 17.30" radius with a 1.76" diameter		
top curl.		
Ribs - eight, 0.25" thick, variable profile, electrically welded to sheet, torsion tube and		
0.25" thick, high strength steel base channel.		
Torsion Tube - 2.00" diameter, full width, electrically welded to all eight ribs.		
Cutting Edge - reversible 0.50" x 6" high carbon steel C1080 attached with ten 0.63"	_	
Grade 5 carriage bolts.		
Disc Shoes - two, full rotation, height adjustable, Austempered Ductile Iron shoes with		
integral l" diameter shaft secured to blade with lynch pins. Shoe brackets shall be		
welded to vertical ribs.		
Blade Trip - 50 degree full blade trip	Ш	Ш
Trip Springs-four, 2.38" OD x 0.39" diameter, Cl 060, hard drawn, stress relieved wire,		
preloaded, with 0.63" x 4" eyebolts.  Shock Absorbers - two, 5" stroke, shielded shock absorbers to retard extension velocity		Ш
and dampen blade trip return.	П	
Blade Trip Pivot - three 0.75" diameter steel pins.		
Blade Guides - two highly visible, vinyl coated, spring wound, with replaceable flags.		
zina zinaz vii o inginj visioto, vinji vomon, spring vionin, vitin replacemble mags.		

	COMPLIAD YES	NCE NO
OPTIONS: (Cont'd) 5A. 9.0' Readily Detachable Snowplow System (Cont'd)		
A-Frame:		
Electrically welded, reinforced, 3.00" x 3.00" x 0.19" wall structural steel side tubes with 0.50" thick, formed nose plate and integral attachments for angling rams to receive 1.00" diameter pins.  Lift Chains - two, 0.25" Grade 43 high test steel with 2600 lb. working load limit,		
attached with 0.38" U-bolts.		
<b>Quadrant:</b> Electrically welded, reinforced, 5.00" OD x 0.25" wall structural steel tube with 0.50" thick nose plates and integral attachments for angling rams to receive 1.00" D pins. A-Frame to Quadrant Angle Pivot - 1.00" diameter Grade 5 bolt.		
Lift Frame:		
Lift frame to have provision for attachment of out front hydraulics and light kit.  Lift Arm- 0.25" x 2" formed bar welded with a 7 ga. steel cover.  Two Plow Stands - Self-storing and adjustable integrated into the plow attachment		
mechanism. Connecting hook and lever with integral with a 0.50" lock pin.		
Lift Frame - Two piece lift frame with tubular construction. Lower lift frame to include drive in plow alignment horns.		
Mount: Custom designed, electrically welded, structural steel mounting readily adaptable to truck frame. Attached to truck with Grade 5 fasteners.  Vehicle, with mount attached, shall meet federal motor vehicle safety standards by compliance or by vehicle manufacturing approval.  Removable receiver brackets for additional ground clearance.		
Paint: Plow blade shall be made of shot blasted steel and cleaned with phosphate solutions and have baked-on red polyester powder coating.		
A-Frame, Quadrant and Lift Frame - shall be made of shot blasted steel and cleaned with phosphate solution and have baked-on black powder coating.		
Hydraulics: Electric solenoid activated and detachable with lift.		
Front mounted hydraulic unit consisting of a fixed displacement gear pump, with 1750 PSI system relief, direct tang driven by a 4-1/2" 12 volt DC motor.		
Pump with filter screen shall be immersed in a steel deep drawn reservoir.		
Main valve manifold shall contain three side mounted and covered solenoid cartridge valves	П	

	<b>COMPLIANCE</b>	
	<b>YES</b>	<u>NO</u>
OPTIONS: (Cont'd)		
5A. <u>9.0' Readily Detachable Snowplow System</u> (Cont'd) Hydraulics (Cont'd)		
Secondary valve shall contain 2 driver side and 1 curb side mounted and covered		
solenoid cartridge valves. Cushion relief valves set at 4,000 PSI and a quill adjustment		
screw to adjust blade drop speed.		
One 1 1/2"x 8" lift ram and two 1-1/2" x 12" angling rams each with a rod seal,	_	_
a wiper ring and a gland nut.		
Hydraulic hoses shall be 1/4" steel braided SAE 100R1.		
Hydraulic unit shall be controlled by a soft touch, hand held in-cab control.		
Control shall be equipped with an on/off and mode buttons and indicator lights.		
Control can be dash mounted.		
In-cab control shall be connected to valve manifold and to the motor through an		
auxiliary 12-volt multiplexed harness.		
Power and control harness to have quick disconnects and covers at the grill.		
Control shall allow plow to be in float when lowered and also be able to angle left		
or right when in float.		
Unit shall be a "low side" drive system, which provides positive potential continuously		
with a switched ground to control the solenoids.		
Unit shall possess programmable security lockout feature.		
Unit shall possess programmable hydraulic soft stop feature.		
Unit shall possess programmable one touch float feature.		
Hydraulic fluid shall be MJL5606 equivalent standard transmission fluid (ATF)		
or aircraft hydraulic oil for low-temperature operation.		
Cycle times:		
• Lift 2.5 seconds	_	_
• Angle 5.0 seconds		
Hydraulic unit shall stay with plow when plow is disconnected from truck.		
Lights:		
Nighthawk LED Headlamps		
Vehicle specific pre-wired harness with plug-in module requiring no		
headlamp wire splicing.		
Plow and vehicle lights automatically selected through relay system.		
Heavy-duty flashers.		
Double stud mounting brackets.		
FMVSS 108 compliance for lights.		
Lights and mounting bracket to stay with plow when disconnected from truck.		

OPTIONS: (Cont'd)  Sta. 9.0° Readily Detachable Snowplow System (Cont'd)  Plow Removal:  Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be removed in one step from truck as one complete unit.    Can be compared to the state of the combo.    St. Cirrus Hydraulics System		COMPLIA	
5A. 9.0° Readily Detachable Snowplow System (Cont'd) Plow Removal: Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be removed in one step from truck as one complete unit.  Snow deflector Curb guards both sides Cab command Hand Held Control/or joystick- specified at order  SB. Cirrus Hydraulics System PTO and Pump: Hydraulic pump and PTO shall be a Chelsea 249 series. The pump shall be a fixed displacement that is direct mounted to a hot-shift PTO for a live transmission with a gas engine. The pump shall have a flow rate of 19 GPM at 1200 engine RPM. The pump shall have a ¼"-11T splined drive shaft. The suction hose to the pump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose. The PTO shall be a Parker/Chelsea 249 series and have a ratio of 124%. The PTO shall be a Parker/Chelsea 249 series and have a ratio of 124W. The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch. Power over speed protection required for torque shift six with gas motor.  Stainless Steel Symmetrical Valve Reservoir Combination System: The spool valve sections and spreader manifold will be mounted in a combination reservoir and enclosure. The overall width of the will not exceed 28". The valve shall mount horizontally on a 15.5" removable mounted plate that slides out for easy access for repair and maintenance. The enclosure shall be mounted with a minimum of 1" frame clearance on each side of the combo. Mounting bracket is to be designed and supplied by reservoir supplier and designed in a manner as to not transmit torsional loads through the reservoir. The reservoir portion shall be 14-gallon capacity. The combo will be constructed from 10-gauge 304 Stainless steel with .25 inch steel bracing. The combo shall be powder-coated for corrosion protection with internal baffle Two rubber latches will secure the enclosure lid. The lid must be removable without tools by one person.	OPTIONS: (Cont'd)	<b>YES</b>	<u>NO</u>
Plow Removal:   Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be removed in one step from truck as one complete unit.   Snow deflector   Curb guards both sides   Cab command Hand Held Control/or joystick- specified at order   Sh. Cirrus Hydraulics System   PTO and Pump:   Hydraulic gump and PTO shall be a Chelsea 249 series.   Hydraulic gump and PTO shall be a fixed displacement that is direct mounted to a hot-shift   PTO for a live transmission with a gas engine.   Carrus Hydraulic gump and PTO shall be a fixed displacement that is direct mounted to a hot-shift   PTO for a live transmission with a gas engine.   Carrus Hydraulic gump and PTO shall be a fixed displacement that is direct mounted to a hot-shift   PTO for a live transmission with a gas engine.   Carrus Hydraulic gump shall have a flow rate of 19 GPM at 1200 engine RPM.   Carrus Hydraulic gump shall have a %"-11T splined drive shaft.   Carrus Hydraulic gump shall base a %"-11T splined drive shaft.   Carrus Hydraulic gump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose.   Carrus Hydraulic gump shall be a parker/Chelsea 249 series and have a ratio of 124%.   Carrus Hydraulic gump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose.   Carrus Hydraulic gump shall be a parker/Chelsea 249 series and have a ratio of 124%.   Carrus Hydraulic gump shall be a gump shall be a minimum of 124%.   Carrus Hydraulic gump shall be a gump shall be a minimum of 124%.   Carrus Hydraulic gump shall be gump shall be a gump shall be gump shall be a minimum of 124%.   Carrus Hydraulic gump shall be gump shall be gump shall be gump shall gump shall be gump shall gump shall shall gump shall			
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Snow deflector	Blade assembly, A-Frame, Quadrant, Lift Frame with hydraulic unit all to be		
Curb guards both sides  Cab command Hand Held Control/or joystick- specified at order  SB. Cirrus Hydraulics System PTO and Pump:  Hydraulic pump and PTO shall be a Chelsea 249 series.  The pump shall be a fixed displacement that is direct mounted to a hot-shift PTO for a live transmission with a gas engine.  The pump shall have a flow rate of 19 GPM at 1200 engine RPM.  The pump shall have a 3/4"-11T splined drive shaft.  The suction hose to the pump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose.  The PTO shall be a Parker/Chelsea 249 series and have a ratio of 124%.  The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch.  Power over speed protection required for torque shift six with gas motor.  Stainless Steel Symmetrical Valve Reservoir Combination System: The spool valve sections and spreader manifold will be mounted in a combination reservoir and enclosure.  The overall width of the will not exceed 28". The valve shall mount horizontally on a 15.5" removable mounted plate that slides out for easy access for repair and maintenance.  The enclosure shall be mounted with a minimum of 1" frame clearance on each side of the combo.  Mounting bracket is to be designed and supplied by reservoir supplier and designed in a manner as to not transmit torsional loads through the reservoir.  The enclosure cover shall also cover/ protect the valve work ports and hoses The reservoir portion shall be 14-gallon capacity.  The combo will be constructed from 10-gauge 304 Stainless steel with .25 inch steel bracing. The combo shall be powder-coated for corrosion protection with internal baffle  Two rubber latches will secure the enclosure lid. The lid must be removable without tools by one person.	removed in one step from truck as one complete unit.		
Cab command Hand Held Control/or joystick- specified at order    SB. Cirrus Hydraulics System PTO and Pump:   Hydraulic pump and PTO shall be a Chelsea 249 series.	Snow deflector		
5B. Cirrus Hydraulics System PTO and Pump:    Hydraulic pump and PTO shall be a Chelsea 249 series.	Curb guards both sides		
PTO and Pump: Hydraulic pump and PTO shall be a Chelsea 249 series.         The pump shall be a fixed displacement that is direct mounted to a hot-shift PTO for a live transmission with a gas engine.         The pump shall have a flow rate of 19 GPM at 1200 engine RPM.       The pump shall have a ½"-11T splined drive shaft.       The suction hose to the pump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose.     The PTO shall be a Parker/Chelsea 249 series and have a ratio of 124%.     The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch.       Power over speed protection required for torque shift six with gas motor.      Stainless Steel Symmetrical Valve Reservoir Combination System: The spool valve sections and spreader manifold will be mounted in a combination reservoir and enclosure.       The overall width of the will not exceed 28". The valve shall mount horizontally on a 15.5" removable mounted plate that slides out for easy access for repair and maintenance.     The enclosure shall be mounted with a minimum of 1" frame clearance on each side of the combo.     Mounting bracket is to be designed and supplied by reservoir supplier and designed in a manner as to not transmit torsional loads through the reservoir.     The enclosure cover shall also cover/ protect the valve work ports and hoses The reservoir portion shall be 14-gallon capacity.     The combo will be constructed from 10-gauge 304 Stainless steel with .25 inch steel bracing. The combo shall be powder-coated for corrosion protection with internal baffle     Two rubber latches will secure the enclosure lid. The lid must be removable without tools by one person.			
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The pump shall have a ¾"-11T splined drive shaft.	The second secon	<del></del>	
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The PTO shall be a Parker/Chelsea 249 series and have a ratio of 124%.  The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch.  Power over speed protection required for torque shift six with gas motor.  Stainless Steel Symmetrical Valve Reservoir Combination System:  The spool valve sections and spreader manifold will be mounted in a combination reservoir and enclosure.  The overall width of the will not exceed 28". The valve shall mount horizontally on a 15.5" removable mounted plate that slides out for easy access for repair and maintenance.  The enclosure shall be mounted with a minimum of 1" frame clearance on each side of the combo.  Mounting bracket is to be designed and supplied by reservoir supplier and designed in a manner as to not transmit torsional loads through the reservoir.  The enclosure cover shall also cover/ protect the valve work ports and hoses  The reservoir portion shall be 14-gallon capacity.  The combo will be constructed from 10-gauge 304 Stainless steel with .25 inch steel bracing. The combo shall be powder-coated for corrosion protection with internal baffle  Two rubber latches will secure the enclosure lid. The lid must be removable without tools by one person.	The pump shall have a <sup>3</sup> / <sub>4</sub> "-11T splined drive shaft.		
The PTO shall be engaged/disengaged from the cab by a dash mounted 12VDC on/off switch.	The suction hose to the pump shall be a minimum of 1-1/4" I.D. SAE 100-R4 hose.		
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Two rubber latches will secure the enclosure lid. The lid must be removable without tools by one person.			П
tools by one person. $\hfill\Box$			Ш
• •		П	
	The rubber latches are replaceable with a removable pin.		

	<b>COMPLIANCE</b>	
	<b>YES</b>	<u>NO</u>
OPTIONS: (Cont'd)  5D. Girman Hardwark of Sentana (Cont'd)		
5B. <u>Cirrus Hydraulics System</u> (Cont'd) Stainless Steel Symmetrical Valve Reservoir Combination System: (Cont'd) The reservoir must be equipped with the following: <sup>3</sup> / <sub>4</sub> " magnetic drain plug, 1-1/4" full flow brass ball valve, 2" x 1-1/4" NPT suction strainer with 100 mesh screen and 3 PSI bypass valve, tank mount return line filter with a built in breather, and sight temperature gauge externally mounted facing front of truck no matter which side		
enclosure is mounted on.		
Reservoir filling will be through the filter housing with a flow path that will filter all new oil entering in the system.		
Minimum Specification for Modular Manifold Central Hydraulic System:  The modular manifold must be constructed of 6061 anodized aluminum material.  The modular manifold shall be adjustable to a maximum pressure of 3500 psi with		
multiple flow and pressure performance, with function configuration.  The modular manifold will consist of multiple sections bolted together for multiple		
function configurations.		
The entire hydraulic system shall be completely serviceable without removing from the enclosure or disassembling the sections.		
A one-piece manifold will not meet the intent of the specification for easy maintenance and service.		
The modular manifold must be capable of operating in either open center (fixed displacement) or closed center (variable displacement) hydraulic circuits All functions will be proportional controlled, pulse width modulated, pressure and flow compensated.  Plow and Winch functions must have load hold/ counter-balance.  Any valve without load-holding capability or have internal leakage down standard is <b>NOT ACCEPTABLE</b>		
Heavy-duty 12VDC coils must be protect with a corrosion resistant coating. Connections must be NEMA x6 standards for dust protection and all outside the cab connections shall be rated as NEMA "x8" - protected against the effects of permanent submersion in water as well as able to show no corrosion after 500 hours		
in a 35°C salt spray.  The modular manifold shall be designed for lower pump capacity hydraulic pumps.		
Each sections will have flow capacities from 3 to 20 GPM with load holding on all cylinder section.  The hoist and winch sections shall be 15 GPM, four way for a double acting cylinder		
and incorporate a 500psi relief for the hoist A-port  The spinner will be a 7 GPM motor spool cartridge and the auger/conveyor will be		
8 GPM motor spool cartridge. 15 GPM motor spool for anti-ice. The spinner or auger will not stop when other implements are actuated.		

	<b>COMPLIANCE</b>	
	YES	NO
OPTIONS: (Cont'd)		
5B. <u>Cirrus Hydraulics System</u> (Cont'd)		
Minimum Specification For Modular Manifold Central Hydraulic System: (Cont'd)		
Auger and Spinner cartridge valve will be equipped with screw adjustable manual		
overrides protected by jacketed debris covers. Hoist, Winch, Plow, spool valves will		
have a push/pull ring for the manual override.		
The hydraulic system shall be pressure and flow tested before the installation process.		
Cartridge valves, spool valve, and solenoids must have a 5-year warranty.		
Plow and Switch N Go joystick controllers:		
The in-cab control system shall be a one joystick Cirus Black Tip controller or prior		
approved equal. The single control levers must be true Hall effect (magnetic) joystick		
with two-axis (X & Y) proportional control with no internal metal contacts.		
Amusement grade joysticks for pistol type controllers are not acceptable.		
The joystick console shall mount to the center seat in the down position with two (2)		
adjustable rods that slide into the head rest mounting holes for the Ford F450-F750		
vehicles and with a cup holder mounted bracket in the Dodge Ram 5500 series vehicles.		
The dumping hoist and winch shall be controlled by a single joystick and must have a		
safety trigger protection to activate the hoist and winch function.		
Joystick console must have side bracket to mount spreader controller.		
The user shall have the ability to set the speed of each direction of motion on a PC for		
all hydraulic devices controlled by the joystick without modification to the hydraulic		
system.		
The controller must include integrated protection and diagnosis systems with safety		
features incorporated into the system. Channel Safe <sup>TM</sup> : to protect the system and		
help diagnose external shorted or open circuits. SafeStik <sup>TM</sup> that shuts down the output		
channels if a joystick fails.		
Power Safe <sup>TM</sup> Wiring Design: For safety reasons, grounding or cutting any wire at		
Any point between any valve coil and the controller must not cause any valve to actuate.		
The system must supply pulsed+12 volt power to the other lead from each individual		
valve coil.		
All connections at the hydraulic control junction box must be IP 68 rated. The outside		
the cab harness will be IP 68 rated up to the valve coil connection All connectors shall		
be rated as "6x" - dust proof. All connectors shall be rated as "x8" - protected against		
the effects of permanent submersion in water as well as showing no corrosion		
after 500 hours in a 35C salt spray.		
Installing dealer must be authorized to preform warranty repairs and		
periodic maintenance.		

	<b>COMPLIANCE</b>	
	<b>YES</b>	NO NO
OPTIONS: (Cont'd)		
5B. <u>Cirrus Hydraulics System</u> (Cont'd)		
In-Cab Granular and Liquid Control System:		
The in-cab control system shall be capable of operating output channels for granular		
spreader, and single channel liquid controller on one easily accessible single keypad.		
In-cab controller must be an automotive grade product. Amusement or gaming products	_	_
are NOT ACCEPTABLE.		Ш
The liquid channel can operate an electric or hydraulic pre-wet system controller shall		
also have an optional dash mount, stand-alone, or console mounting options.		
The single touch proportional hydraulic controls shall be time dependent to adjust		
the speed of the hydraulic functions.		
Controller shall have the ability to connect the feed rate and spinner function for		
single stroke simultaneous start up.		
Controller must offer a "Skip Blast" feature allowing for spot blasting during		
"Pause Mode"		
Controller shall offer adjustable valve unseat percentage option: to start auger/conveyor		
with wet heavy salt.		
The user shall have the ability to adjust the speed of each function and the amount of		
granular material or liquid with the soft touch key pad.		
Rotary knobs to control granular feed rate or spinner speed is <b>NOT ACCEPTABLE</b>		
The spreader controls shall operate a granular spreader with auger/conveyor,		
spinner and pre-wet (or anti-ice) output channels. Each function can be operated		
individually or all simultaneously.		
All set-up and programing shall be completed using the controller soft key pad with		
no external programing keyboard.		
Spreader must be field configurable to operate either: Ground Speed Oriented or No		
Ground Speed (simple manual operation) with a single switch setting.		
Controller shall also offer a settable Blast Features that will function during Ground		
Speed Triggered Operation.		
System shall be capable of self-diagnosis using the indicator LED light for each channel		
to trouble-shoot open circuit faults.		
All connections inside the hydraulic valve / electronic control junction box must		
be IP 68 rated.		
All connections will be labeled with appropriate descriptions for each connection to		
individual solenoids of the hydraulic actuating cylinders.		
Cirrus EZ1 Controller Has a 2 Year Warranty		

<b>COMPLI</b>	<b>ANCE</b>
YES	NO

	<b>YES</b>	<u>NO</u>
OPTIONS: (Cont'd)		
<b>5C.</b> <u>Large Stainless Steel VBox Spreader</u> This option also requires the selection of the Cirrus upgrade. Spreader can also be purch vehicle with central hydraulics for 10' Dump body and up.	ased for e	xisting
Hydraulics:		
PTO must be a Chelsea 249H with direct mount pump and 14 gallon reservoir providing up to 9 gallons per minute at 1000 rpm, must be a modular manifold cartridge type valve 5 year warranty Shall be operated by the chassis provided upfitter switches.	with	
General:		
This specification describes a heavy-duty, self-contained hopper spreader designed to spread free-flowing material from 4 to 40 feet. Spreader consists of a steel body and spinner assembly, top screens, pintle-chain conveyor system, power drive and all		_
components required to deliver maximum performance.		
Body:		
Shall be of all welded 12-gauge stainless steel construction and 5.6 cubic yards struck	_	_
capacity.		
The hopper length shall be 10 feet long.		
Overall height of the unit shall be 50 in.		
The overall width to be no more than 82 in.		
Body sides slope at 45° angle to promote free flow of material to the conveyor.		
Front panel shall be tapered 20° to relieve pressure to the conveyor.		
The sides and ends shall be constructed of 12-gauge stainless steel continuously		
welded to each other on the inside of the hopper, and the top of the body shall be		
double crimped, forming a 2 in. section for greater rigidity.		
Body sills to be of formed 10-gauge stainless steel that ties the lower edge of		
the longitudinals to each side support. There shall be an adequate number of 12		
gauge stainless steel side supports on 2 centers that extend the full side angle height		
rigidly tying in to the 7 gauge stainless steel formed channel cross sills with the		
body sides to give the highest degree of resistance to warping or twisting under	_	_
heavy loads.		
The body and conveyor shall be electrically welded into a rugged solid unit.		
A heavy-duty lift hook shall be provided at each corner.		
These lift hooks shall be inserted through holes in the double crimped section of the		
hopper walls, and welded in place for maximum strength.		
A 6x4 in. formed box beam that is welded at each end will be elevated 3 in. above the		
top edge of the hopper, providing a longitudinal brace and hinge point for the top screens	. 🗆	
There shall be a formed 2x2 in. angle iron welded from the box beam to each side		
for additional support.		
The rear endplate shall be reinforced inside and supported outside to give it maximum		
strength.		

	COMPLIAN	
ODTIONS, (Cont.d)	<u>YES</u>	<u>NO</u>
OPTIONS: (Cont'd) 5C. Large Stainless Steel VBox Spreader (Cont'd)		
Conveyor:		
Shall be of the chain barflight type running longitudinally with the body.  The top edge of the longitudinals shall be formed down over the chain link strands,		
leaving only the drag chain bar exposed to the material being spread.  Conveyor width shall be not less than 24 in. and shall be a heat-treated, all steel,		
self-cleaning pintle-type chain.  Chain shall be 2-1/4 in. pitch with 7/16 in. locked non-turning pins and a tensile		
strength of 21,000 pounds.  Chain bar flights shall have a cross section of 3/8xl-1/2 in. x 18-3/4 in. welded on the top		
and bottom to every other link and be positioned on approximately 4-1/2 in. centers. Conveyor gearbox shall have a 50:1 reduction and be of a bronze worm-gear type having a cast-iron housing with a ring-mount bolt pattern and supported on tapered roller		
bearings.  Chain shall be driven through the gearbox by a low-speed, high-torque (1,200 inch lbs.		
at motor, 60,000 inch lbs. where it meets the conveyor) orbital-type hydraulic motor. Conveyor drive sprockets shall be 8 tooth, drop-forged steel keyed to a 1-1/2 in. diameter		
C1045 steel shaft mounted in sealed, self-aligning ball bearings with grease fittings.  The idler sprockets shall be 8-tooth, drop-forged steel welded to a 1-1/2 in. C1045 steel		
shaft which is mounted in sealed, self-aligning ball bearings with grease fittings.  The conveyor bottom shall be of flat design, be of a minimum 3/16 in. steel and roll-over		
edges, shall bolt in and be replaceable		
Spinner Assembly Spinner assembly shall be fabricated from 12 gauge stainless steel, and shall be of		
the bottom mount motor design.  Material shall be guided from the conveyor to the spinner disc by means of an		
internal material baffle, which is easily adjustable without the use of any tools.  There shall be three adjustable stainless steel external spinner deflectors, and one		
fixed front shield to control the direction and width of the spread.		
Baffles shall be adjustable without the use of any tools		Ц
Spinner Disc: The spinner shall be made of polyurethane and shall be 20" in diameter and be		
equipped with six fins designed to give a uniform trajectory from four to forty feet.  This spinner disc shall be bolted to a cast iron hub directly connected to the independent low-speed, high-torque, orbital-type spinner drive motor  Spinner motor shall be 2.8 cubic inch, with nickel plated shaft for enhanced corrosion		
resistance and improved seal life.		

ODTIONS, (Con424)	COMPLI YES	ANCE NO
OPTIONS: (Cont'd) 5C. <u>Large Stainless Steel VBox Spreader</u> (Cont'd)		
Spinner Extension:		
The spinner extension shall connect the spinner assembly to the longsills of the spreader, and shall be fabricated from 12 gauge stainless steel.		
The extension shall provide adjustable mounting heights of the spinner assembly with a range of 15 inches, in increments of 3 inches.		
Inverted Vee:		
The spreader shall have an inverted vee over the conveyor to improve material flow to the conveyor.		
The inverted vee shall have four support brackets to hold it in place.		
The inverted vee shall be a formed angle, 8 X 8 in. X 12 ga. stainless steel		
<b>Top Screens:</b> Sectional screens with a maximum length per section of three feet shall be hinge		
to the 4 in. x 6 in. box beam which is made of stainless steel, and is bolted to		
both ends of the hopper. Screens shall be constructed of 3/8 in. diameter steel rods welded to form a 2-1/2 in.		Ш
square mesh which is framed by a combination of $1/4$ " X 1 $1/2$ ". flat steel and 2 in.		
angle iron with edge supports reinforced by 1/4" X l" in. flat bars.		
Screens shall be removable and use a lock-type hinge.		
Finish:		
All metal shall have the mill scale, weld splatter, and oil residue removed and the		
surface shall be electro-chemically cleaned. All stainless steel shall be left unpainted. All mild steel components shall be		
painted black.		
Light Bar Assembly:		
Light bar assembly with stainless steel enclosure. 78 in. wide, bolt on (4) LED.		
stop/turn/taillights and ICC ID marker lights, wire harness with pigtail and 7-prong trailer plug RV Style.	П	П
trailer plug KV Style.	Ш	Ш
Grease Extensions:		
Front bearing grease extensions to the rear of unit with manifold		
Chain Oiler:		
Shall be of a gravity flow design with a manual shutoff valve and have a reservoir capacity of 4 quarts.	_	
Tank shall be polyethylene construction		

EQUAL (CONT <sup>2</sup> D)	COMPLIAN	c E
	YES YES	<u>CE</u> <u>NO</u>
OPTIONS: (Cont'd)		
5C. <u>Large Stainless Steel VBox Spreader</u> (Cont'd)		
Winch Assembly:		
Winch assembly for BV or BVA models, hand crank to swing up spinner assembly.		Ц
Short Hose Kit:		
Short hose kit includes Pioneer 4004PH quick-disconnect couplers (two sets)	_	_
and four 1/2 in. hoses.		
Subframe and Body Rollers		
6" round rollers, powder coated black subframe		
5D. Dump Body for 11' Floor Length		
This body shall go with upgraded system from base. Can be purchased with truck or on in	ts own for an ex	cisting
unit.	v	Ü
Dump body:		
• 11' floor length		
• 24" high two-way dump gate		
• 40" high bulkhead		
• 10 gauge floor		
• 12 gauge sides and 12" side board pockets		
• Subframe and 6" ground rollers		
• 18" Cab shield		
Heavy Duty D-Rings		
Painted Black	П	
6" Wide Conspicuity Reflective Tape inverted "V" Red White complete rear of		
body and 1-3/4" red white down side of body line		
body and 1-3/4 Ted white down side of body fine		Ш
5E. Stainless Steel Dump Body for 11' Floor Length		
This body shall go with upgraded system from base. Can be purchased with truck or on it unit.	ts own for an ex	cisting
<b>Dump Body DB-I I-Stainless:</b>		
• 304 Stainless Steel w/ structural steel understructure		
<ul> <li>Floors are 10 ga stainless steel w/ structural steel w/ 3" crossmembers on 16" cent</li> </ul>	ers	
• Floor width 88"		
<ul> <li>Tailgates constructed of 3/16" x 2" x 2" 304 Stainless steel tubing with 304</li> </ul>		
stainless steel 10 ga sheet, 27" H		
<ul> <li>40" 12 ga 304 stainless steel bulkhead</li> </ul>		
• 18" Cabshield		
• 12", 12 ga 304 stainless sides with 12" board pockets		
Heavy Duty D-Rings installed		
Standard 6" Steel wheels		
6" Wide Conspicuity Reflective Tape inverted "V" Red White complete rear		
of body and 1-3/4" red white down side of body line		

EQUAL (CONT <sup>2</sup> D)	COMPL YES	IANCE NO
OPTIONS: (Cont'd) 5F. Platform 11' Overall Floor Length This body shall go with upgraded system from base. Can be purchased with truck or of		_
<ul><li>unit.</li><li>11' long platform, 1/8" diamond plate floor, 8' flat deck with l' ramp tail</li><li>1-3/4" red white reflective conspicuity tape down side of body line and around rear</li></ul>		
<b>5G.</b> Medium Duty Dump Box This body shall go with upgraded system from base. Can be purchased with truck or of unit.	on its own for	an existing
10 cubic yard drop box, 11' long and 39" high, dump-style tailgate. Floor, sides and tailgate all 12 gauge material. 2 side posts.  Crossmembers are on 24" centers. 3" X 3" tubing top rail  Swing Door to curbside  6" Wide Conspicuity Reflective Tape inverted "V" Red White complete rear of body and 1-3/4" red white down side of body line		
5H. Medium Duty Dump Box High Sides This body shall go with upgraded system from base. Can be purchased with truck or of unit.	on its own for	an existing
13 cubic yard drop box, 11' long floor and 51" high, dump-style tailgate.		
Floor, sides and tailgate all 12 gauge material. 2 side posts. Crossmembers are on 24" centers. 3" x 3" tubing top rail Swing Door to Curbside		
6" Wide Conspicuity Reflective Tape inverted "V" Red White complete rear of body and 1-3/4" red white down side of body line		
<b>5I.</b> <u>Manual Tarp:</u> For either dump or drop boxes		
5J. Stake Sides and Removable Rear Stakes		
<b>5K.</b> <u>Horizontal Split Door for Use Chipper Top</u> For use with drop boxes; Can be purchased at a later date		
<b>5L.</b> 24" Deep Chipper Top Leaf top has additional venting for the air to escape - must specify at time of Purchase		
5M. <u>Coal Chute</u> Dump Body		
5N. Side Door in Drop Box Located curbside by bulkhead in drop box		

	COMPLI	
OPTIONS: (Cont'd)	<u>YES</u>	<u>NO</u>
50. Mason Type Tarp		
• Waterproof		
• 3 bar crossmember support		
Drop Box application only		
5P. Split Doors for Drop Box For Chipper or Leaf Application		
l' Ramp on platform		
Not to be selected if selecting a spreader for platform application		
5Q. <u>Fold Down Sides Steel</u>		
Dump Body		
5R. Fold Down Sides Aluminum		
Dump Body		
5S. Road Department Paint Color Scheme		
Can be selected with all chassis options		
Chassis to be prepped properly; sand appropriate area to reduce peeling	_	_
School Bus Yellow from the bottom of the windows down	Ш	Ш
Academy Blue #5240 from the bottom of the windows up to and		
including cab roof and back		Ш
On hood from bottom of windshield to a point on the hood to make		
a "V" and match the road department fleet	Ш	
5T. Light Package:		
Whelen Amber LED Lights: Body upfitter must provide installation of lights so they work in conjunction with the		
equipment on the truck.		
4 Micron Series Super LED in grill Amber		
<ul> <li>2 Micron Ion Series Super LED on rear bracket offender Amber</li> </ul>		
5U. Go Lights		
Mounted on cab roof:		
One (1) Go Light GXL Xtreme Work Lights		
• 6000 maximum lumens		
• 5 amp draw		
• 9-32VDC input		

**COMPLIANCE YES NO** 

OPTIONS: (Cont'd) 5V. Stainless Steel UTG Spreader		
This accessory must have central hydraulics and spreader controls, used on dump bodies	and chassis	
configuration. This option can also be purchased separately and installed on another veh		ts
these requirements.		
General: This 6 is a sugar we don't all locate annual angle 11 ha of the hettern anguing design with a		
This 6 in. auger under-tailgate spreader shall be of the bottom-opening design, with a safety shut off feature built into the hydraulic system.	П	
This mounting shall allow the dumping of materials without interference from the		
spreader.		
The spreader width shall not be over 96 in.		
The spreader width shall not be over 70 m.		ш
Mounting:		
The entire unit will mount to the sides and below the floor level of the dump box		
with single-pin, quick-detachable hardware.		
Mounting and removing shall be done without the use of any special tools.		
Safety Shut-Off:		
The spreader shall incorporate a hydraulic safety shut-off feature that disables the		
hydraulic functions of the spreader.		
This shut-off shall prevent opening the bottom door or opening the top cover beyond		
a vertical position when the hydraulics are engaged.		
Feed Mechanism:		
The six-inch, heavy-duty auger shall consist of 3/8 in. flighting with 4 in. pitch which		
is welded to a 2-3/8 in. O.D. Schedule 40 pipe.		
This auger shall have continuous and reverse flighting for more uniform emptying and		
is supported by 1-1/4 in. steel shaft ends.		
The auger shaft will be supported on one end in sealed, self-aligning, precision single-rov	v	
radial bearings with grease fittings and on the other end by the drive mechanism.		
The auger shall be powered with a 22.6 cubic inch displacement hydraulic motor capable		
of delivering high torque at low speeds mounted to the end plate and directly coupled to		
the auger by a non-corrosive UHMW polyethylene sleeve and a 1/2 in. Grade 5 bolt.		
The discharge port is located 24 in. from the left end.		
Stainless Steel Hopper:		
Rigid one-piece end plates of 7 ga. stainless steel shall be continuously welded		
to an auger trough of 7 ga. stainless steel.		
The unit will have a three-point hinged bottom pan that will expose the entire auger		
for easy clean out. This pan will be fabricated of 7 ga. stainless steel.		
The hinged bottom pan shall be held in place with two heavy-duty cam locks with a		
lifting handle near each lock for easy one-man handling.		

	COMPLI YES	IANCE NO
OPTIONS: (Cont'd)		
5V. Stainless Steel UTG Spreader (Cont'd)		
Stainless Steel Hopper: (Cont'd) The anti-spill cover over each discharge opening will be of 7 ga. stainless steel and		
shall be removable without the use of tools.		
The lid will be of 7 ga. stainless steel and will be an integral part of the unit that may	_	
be raised when spreading or lowered when dumping.		
This lid shall be locked in position by two latches that are replaceable.		
Inside width of the trough shall be a minimum of 10-7/8 in.		
Poly Spinner Disc:		
The spinner shall consist of a single 18 in. diameter polymer disc with six formed		
polymer fins, to provide a flat trajectory and uniform spreading pattern from four to		
forty feet.		
The spinner assembly shall be adjustable, allowing for variable spreading patterns		
left, center, or right by sliding the hinged frame sideways on the shaft so that the		
point at which the material hits the spinner disc is varied.		
The spinner assembly shall be adjustable in height, providing four different ground		
clearance settings by means of four bolts.		
The entire spinner assembly shall be easily removed by pulling two pins and		
uncoupling two hydraulic quick-disconnect hoses.		
The spinner speed rate shall be variable through optional valve systems.		
The polymer spinner disc will be mounted directly onto the hydraulic motor shaft		
by means of a steel spinner hub.		
Spinner motor shall be 2.8 cubic inch, with nickel plated shaft for enhanced		
corrosion resistance and improved seal life.		
The spinner assembly shall remain horizontal to the road at all dump box angles.		
A spinner shield shall be provided to prevent material from striking the truck.		
Finish:		
All carbon steel components shall be painted black.		
Stainless steel components shall be left their natural finish.		
Spill Shields:		
Steel spill shields shall be mounted to tailgate to stop any salt from spilling out the	_	_
sides of the rear of the body		
Dump Accessibility:		
No hydraulic hoses or trough handles are to be above the surface of the spreader.		
Clean dumping surface must be provided		$\sqcup$

	<b>COMPL</b>	<b>COMPLIANCE</b>	
	YES	NO	
OPTIONS: (Cont'd)			
5W. <u>Flat Bed Service Body</u>			
General:			
It is the intent of this bid to specify a 12' service body to be up fitted on a Switch			
N Go System for an 84" CA, this option is to be used with 11' Switch N Go System		Ш	
Dimensions:			
Floor:			
T&G Extruded Aluminum			
• 102" x 56-3/8" Wide Center			
Rear Service Body Tailgate			
Latches:			
<ul> <li>Manual Master Locking System</li> </ul>			
Compartments:			
• 3 Per Side - 40 3/16" W x 34 7/16" T		_	
Welded to Flatbed Floor			
Flatbed Construction:			
• G-Tube Perimeter/2x3 .125 Cross Members			
• 12" OC/2x3 .188 Box Tube Long Sills (Gussets every 4" from front to back)			
All Extruded 6005 Aluminum/Box Tube Construction			
Bulkhead:			
Extruded Aluminum Headboard  D. D.			
D-Rings:			
6 Recessed Stainless Steel D-Rings (3 Per Side)  Society Level of A 4K LP Potition Francisco Seconds			
• Spring-Loaded, 4.4K LB Rating, Evenly Spaced		Ш	
Cargo Securement:			
2 Rows of E-Track Center Body Length  A Rotal of Strong 2" or 12"			
• 4 Ratchet Straps 2" x 12' Body Shell:	Ш		
Paint to match County Department Color			
<ul> <li>Each Cabinet to have 3 shelves with dividers</li> </ul>			
Each Cability to have 3 sherves with dividers			
5X. Brine Water Tank			
This unit as specified will need to operate with a central hydraulic system. It can be use Applications	ed on all Swi	tch N Go	
General:			
The system shall have the capability to maintain a uniform application rate of deicing			
liquid materials behind the truck. The system will have the capability of being used in			
a manual control (open loop) and automatic control (closed loop). System will consist of	of		
a single lane stainless steel spray bar.			
Liquid pumping system shall have a hydraulic driven liquid pump. Hydraulic driven			
systems shall be available up to 100 gpm output.		П	

	<b>COMPLIAN</b>	
OPTIONS (C. 41)	<b>YES</b>	<u>NO</u>
<u>OPTIONS:</u> (Cont'd) 5X. <u>Brine Water Tank</u> (Cont'd)		
Fluid Handling Components:		
All fluid handling components shall be constructed of material suitable for handling		
liquid deicing chemicals without deterioration, corrosion or damage.		
Plumbing shall not contain any components manufactured from galvanized or		
steel fittings.		
Liquid tank size shall be 735 gallon.		
Overall dimensions of tank shall not exceed 104" length x 48" W x 49" H (including lid).		
Tank will include an option of being mounted on a sub frame with stand that will allow		
for raising the dump body to install and remove the tank assembly without the use of		
front end loader or forklift.		
Tank will be mounted to either steel subframe or other tank support utilizing		
ratchet straps.		
The tank will have gallon markings visible on the rear of tank		
Liquid Pump:		
Hydraulic driven centrifugal pump:		
• A liquid centrifugal pump driven by a hydraulic motor with a maximum output		
of 235 gpm to allow application rates of up to 60 gallons per lane mile at 60 mph		
on the highway.	C	
Additional liquid centrifugal pumps will be available to allow maximum output of the second sec	İ	
25 or 100 gpm to allow application rates at low speeds and application rates for		
parking lot or side streets		Ш
System shall have inline removable inlet strainer with 304 stainless filter screen. Screen mesh shall be sized to handle all types of deicing chemicals and protect the		
pumps and other downstream components from becoming plugged, restricted or pre-		
mature wear.		
mature wear.		
Plumbing:		
A manual ball valve is required at the outlet suction of the tank to isolate the		
liquid from draining from the tank if service is required to the liquid pump,		
shut offs, check valves or any part of the spraying system.		
Tank shall have a second manual 3-way ball valve to allow for filling of the tank by		
an independent external pump through a 2-inch fitting, or self-loading of the tank by		
the trucks 2" suction hose and pump		
The 3-lane main boom section shutoff off assembly shall be a KZCO common manifold		
that does not require flange style fittings between each lane section left, center and right.		
Each boom shut off section is a ball style off/on electrical valve that requires a 12 volt on	,	
0 volts off control signal and operate from closed to wide open in 1.5 seconds or less		

	<b>COMPLIANCE</b>	
	<b>YES</b>	<u>NO</u>
OPTIONS: (Cont'd)  5V. Pring Water Tank (Cont'd)		
5X. <u>Brine Water Tank</u> (Cont'd) Plumbing (Cont'd)		
Quick coupe connections to have integral cam locks and tethered dust caps/plugs		
Spray Bar:		
The spray bar shall be designed to provide an application of liquid de-icing material right behind the truck in a single boom application		
Spray bar shall not exceed 8 feet in length. Spray bar shall be assembled with vertical sidebars (left and right boom sections and horizontal center spray bar) and manufactured from 304 stainless steel		
Spray bar shall be constructed of stainless steel with stainless steel nozzles. Center spray bar shall have a minimum of twelve (12) nozzles		
<b>Tank Mounting:</b> The 735 gallon tank will be mounted to a powder coasted steel sub frame with 2		
ratchet straps. The dimension of the sub frame shall be 58" in width and 120" in length		
The sub frame with stand consisting of legs that fold or pivot to allow for easy storage of tank on the ground and ease of installation into the dump body. The front legs will fold us as the tank is inserted into the dump body allowing for installation and removal of the tank assembly without the use of a front end loader or forklift.		
<ul> <li>5Y. 48" Under Body Tool Box</li> <li>For use with Ford F-550 with 84" CA and No I-Pack Tool Box-Platform and Dumping Platform. Can be purchased for existing vehicles that meet these requirements.</li> <li>Weatherguard Tread plate Aluminum 650-0-02:</li> <li>48" X 18" X 18"</li> </ul>		
• 16.0 cu ft		
• Door Opening 19-1/2" High and 43-1/4" Wide		
Stainless Steel D-Handles		
5Z. 30" Under Body Tool Box		
For use with Ford F-550 with 60" CA on Dump Body and Platform. Can be		
purchased for existing vehicles that meet these requirements.		
Weatherguard Tread plate Aluminum 631-0-02:  • 30-1/8" X 18" X 18"		
• 5.4 cu ft		
<ul> <li>Door Opening 13-1/2" High and 25-1/4" Wide</li> </ul>		
Stainless Steel D-Handles		

	COMPLIANCE	
OPENONG (C. 41)	<u>YES</u>	<u>NO</u>
OPTIONS: (Cont'd)		
<b>5AA.</b> <u>Arbor Body: AB-11</u> Structural Steel Construction with ZRP Zinc Primer Rubberized underneath		
protectant coating		
Painted to match cab		
Body width interior 76" with interior ladder box and 96" exterior	Ш	Ш
Floors are constructed of 10 ga. Galvanneal steel with formed 3"x 3/16" Channel with corner gussets		
Roof & Tailgate are constructed of 14 ga. Galvanneal steel		
Sides are constructed of 12 ga. Galvanneal steel with side stiffeners On 36" center		П
Tailgates are constructed of a 14 ga. Steel sheet with 1-1/2" x 1/8" Tubular frame	_	_
work with a height of 30"		
Storage compartments: 1 rear ladder storage 17" wide with sloped top and roller		
shelf and thru-storage compartment 26" wide by 29"		
Body equipped with Stop, Turn, Tail Lights, Clearance & Strobe Lights		
Installed		
Standard 6" ground rollers		
5BB. <u>Van Body: VB-1283</u>		
Aluminum Box Tube Construction with a smooth .049 bonded Exterior white		
skin finish		
Interior Body widths are 92" and exterior width is 96" Interior height is 83.5"H		П
Roofs are constructed of a one piece .032 Aluminum crown roof with Radius front	_	_
roof & vertical corners for aerodynamics	П	
Floors are constructed of tongue and groove extruded aluminum Interior sides are	_	_
constructed with ½ plywood with e-track for Customizable solutions		
Extruded 6005 T6 Alum Box Tube construction, 2" x 3" crossmembers at 12"		
Centers		
Rear door opening: 86" W x 77" H, Roll-up door with stainless steel Fastener		
Standard 6" steel ground rollers		
5CC. Work Ready Subframe: WRSF-11		
Structural Steel Construction with zinc prime and powder coat finish		
Body width is 80" outside with a 26" W x 9" D rear cutout		
Floors are constructed with a center 1/8" diamond sheet and 19" Wide		П
<sup>3</sup> / <sub>4</sub> " expanded metal sides crossmembers are constructed of 3" structural		
channel on 12" centers		
equipped with two front retractable legs and two detachable 6" ground rollers		

	<b>COMPLIANCE</b>	
OPTIONS: (Cont'd)	<b>YES</b>	<u>NO</u>
OPTIONS: (Cont'd) 5DD. Maxscaper 12' Aluminum Landscaper Body Attachment		
GENERAL		
Outside Dimensions: 12' Long X 96" Wide		
Inside Dimensions:	_	_
48" Height X 88" Wide		
Cross Members:	_	_
On 12" Center – 2" x 3" x 1/8"		
Construction:		
All Aluminum 6000 Series Box Tube Construction		
Premium B-Tube Perimeter Frame 6000 Series		
Aluminum Sheet Sides .125" 5000 Series		
Flat Bar Tie Rail 2" x 1/4"		
3/16" Smooth Aluminum Floor		
2" x 3" Crossmembers on 12" Centers body to be ordered without longsills to fit on		
Switch N Go rails, also a doghouse is to be cut out so the body bulkhead so it slides	П	П
all the way forward for installation	Ш	Ц
Heavy Duty Rear Corner Posts 3" x 3" 6000 Series Aluminum		
Barn Doors with Polished Stainless Steel Locking Bar		
Solid Aluminum Headboard .125" (screened window cover is not acceptable)		
52" wide side door at front corner of curbside of body with Stainless Steel Locking Bar		
6" Wide Conspicuity Reflective Tape inverted "V" Red/Yellow complete rear of body and 1-3/4" red white down side of body line		
Switch N Go Subframe with 6" Rollers		
<ul> <li>All dissimilar metals to have Teflon liner between the two (2) metals before installation</li> </ul>	П	П

<u>(                                </u>	COMPLIANCE	
OPTIONS: (Cont'd)	<u>YES</u>	<u>NO</u>
5DD. Maxscaper 12' Aluminum Landscaper Body Attachment (Cont'd)		
Aluminum Leaf/Chipper Top:	_	_
All Aluminum Construction		
Bolts to top rail of Landscape Body		
Extruded Aluminum Frame		
Smooth Side 1/8" Mill Finish sides		
Heavy Duty 3/16" front wall sheet		
Punched Ventilation in roof sides  - 3 6" x 12" punched vents screened in bulkhead  - 1 6" x 12" punched vent screen in front section of each side  - 3 6" x 12" punched vents screened in center of each side of body  - 1 6" x 12" punched vent screen in rear panel on each side of body		
Punched Ventilation in roof top - 4 12" x 12" screened vents spaced evenly in the roof		
Lifting hooks total of 4		
Rear of chipper top shall have a single aluminum fold down door and be pin able to work in conjunction with rear doors so it doesn't flop around, upfitter shall cut a hole in door to work with leaf machine approximately 12" in diameter, bottom of the hole to be 105" off ground		
Teflon gasket to be installed on bottom of the leaf/chipper top		
Switch N Go Rails and undercarriage to be coated with Ziebart undercoating.		
<b>5EE.</b> Chipper Leaf Top for Landscaper  Bolt on Chipper top for Aluminum Landscaper  Additional venting for leaf cap, must specify at order		

		<b>COMPLIAN</b>	CE
		<u>YES</u>	NO NO
	ONS: (Cont'd)		
. –	Diagnostic Tools / Test Equipment		
1.	1 11 3		
	complete sets of OEM testing/diagnostic/programming equipment (i.e. laptop,		
	software, cabling, and adapters) and special tools required to perform the full range	ge	
	of diagnostic and maintenance actions necessary to maintain vehicle operability.		
	This equipment will cover the vehicle chassis, engine, transmission, brakes,		
2	hydraulics, and all additional equipment (if applicable)	<u>.</u>	
2.	All laptop computers will be of the newest available technology and have sufficie	nt	
	storage and memory to operate all required software	Ц	Ш
3.	Provide a list of all test/diagnostic/programming equipment and special tools	_	_
	being supplied at the time of bid		
4.	All software installations and activations will be completed by the successful	_	_
	bidder at no cost to the County		
5.	All software updates and renewal will be provided at no cost to the County		
	for a period of five (5) years from the acceptance of the equipment		
6.	All technical issues relating to test/diagnostic/programming equipment and		
	special tools shall be resolved by the successful bidder at no cost to the County		
	for a period of five (5) years from the acceptance of the equipment		
7.	Training shall be provided on all items in this section at a specified County		
	Location		
<b>5</b> 00			
	Two-Way Radio Power and Wiring Requirements for New Vehicles		
	e purpose of installing two-way radios into new County vehicles and equipment,		
the 101	lowing power and wiring components shall be included:		
•	#12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps		
•	#12 AWG BLACK wire connected to chassis ground		
•	#16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps		
Wires	shall be encased in plastic wire loom and routed from their source into the		
	the vehicle and secured in the vicinity of the operator.		
	g harness shall be clearly labeled "TWO-WAY RADIO". Wires shall be unterminate	d	
_			

#### 5HH. Installation of County Supplied Two Way Radio and Accessories

Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
- #12 AWG BLACK wire connected to chassis ground.
- #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

	COMPLI YES	ANCE NO
OPTIONS: (Cont'd)	125	110
5HH. Installation of County Supplied Two Way Radio and Accessories (Cont'd) These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle. The wiring harness shall be clearly labeled "TWO-WAY RADIO".		
The 12VDC sources shall be protected from making contact with grounded metal surfaces.		
5II. <u>Technical Support</u> Technical Support is to be provided by factory authorized technical representatives		
and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting		
The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification		
<ul> <li>Technical support may be requested in the following areas</li> <li>Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.</li> <li>Transmission – 1 day at each location</li> <li>Electrical – 1 day at each location</li> <li>Brakes – 1 day at each location</li> </ul>		
<ul> <li>Hydraulic system (dump body, spreader, snow plow) – 1 day at each location</li> <li>Upfitter (dump body, sweeper, etc.) – 1 day at each location</li> </ul>		
Technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks)		
Shorter training days shall be allowed only with consent of Vehicle Services		
Total training hours shall be provided and no additional compensation will be considered		
Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder		
For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled		
Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper education	П	П
TOT PTOPET CONCENTION		

EQUAL (CONT'D)		<u> </u>
	COMPLIAN YES	CE NO
OPTIONS: (Cont'd)		
5II. <u>Technical Support</u> (Cont'd)		
Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:		
• Toms River, 152 Chestnut Street, Toms River, N.J. 08753		
(Two (2) sessions will be provided at this location: One beginning at 7 am and another beginning at 1:30 pm)		
<ul> <li>Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050</li> </ul>		
Successful bidder shall provide Technical Support sessions for other Departments which will be held at an Ocean County location specified by the requesting Department		
Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only		
Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service		